

MUNICIPAL OWNERSHIP IN GREAT BRITAIN.  
CONCILIATION IN THE STOVE INDUSTRY.  
LAWS RELATING TO CHILD LABOR.

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DEPARTMENT OF COMMERCE AND LABOR.

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# BULLETIN

OF THE

# BUREAU OF LABOR.

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## MUNICIPAL OWNERSHIP IN GREAT BRITAIN.<sup>(a)</sup>

BY FREDERIC C. HOWE, PH. D.

### INTRODUCTION.

In Great Britain municipal ownership is commonly known as municipal trading. Its critics call it municipal socialism. But it is not socialistic in intent, whatever its ultimate significance may be. The great extension of municipal activity that has taken place in recent years is not inspired by socialistic motives; at least they are secondary. Municipal ownership was primarily promoted by the business men in control of the town councils, men who were not socialists by any means. In many cities socialists have a representation in the council, but they have not yet acquired sufficient power to direct public opinion, although they are always to be found on the side of any movement for a furtherance of municipal ownership.

In its beginnings municipal ownership was not socialistic, it was not even an outgrowth of the labor movement; it came rather from the mercantile or commercial classes. The councils of several boroughs, notably West Ham and Battersea, are controlled by labor representatives, but the larger cities and county boroughs are in the hands of business men, who, with the more public spirited of the leisure class, make up the personnel of municipal administration.

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<sup>a</sup> The present report is based on a study of the leading cities in England, Scotland, and Ireland during the summer of 1905. It represents, in reality, the results of three separate investigations into the same subject, the earlier ones being on personal initiative. The official investigation was conducted by personal inquiry and conference with officials and citizens in nearly all of the leading cities. It was supplemented by circulars of inquiry sent to more than one hundred local authorities in the United Kingdom. The documentary reports on which the conclusions of the report are based are readily accessible to those who desire further information.

Moreover, the movement was well under way long before the voice of labor was raised in local affairs. Many cities have owned their water and gas undertakings for generations. The later extension of the movement to street railways, electric lighting and power, and telephone service has been urged as a natural and proper application of a programme that had already justified itself in a financial and social way.

Municipal ownership did not come in unopposed. It had its way to make, both locally and in Parliament. It is still a heated political question, and occupies a large amount of attention at Westminster and in the press. For public ownership is trenching on private business—on the big business of municipal franchises, and here and there on the small business of the manufacturer and retail dealer. The opposition of the latter is as yet unorganized and insignificant. The organized hostility comes almost exclusively from the former class, chiefly the electric lighting and traction, the steam railway, and the other franchise companies, whose identity with the financial interests of the nation creates a common class feeling.

In the towns, however, the issue is not one of principle; it is one of expediency, of business advantage. Thus far the movement has had with it the large element which passes in Great Britain without protest as "the middle class." This class is dominant in local politics, though not in Parliament. From it the majority of the town councils are made up. It is the great taxpaying class, and it has seemingly been following what it deemed to be self-interest in the promotion of schemes for the ownership of the street railway, electricity, and gas undertakings.

In its present stage of development municipal ownership is inspired by no ideal of a changed social order, and the movement is likely to continue to be one for improved service, for business thrift, for the relief of the taxpayer from the burdens of taxation, and for increased revenue for the community.

## THE MOTIVES OF MUNICIPALIZATION.

Municipalization has become a political issue in Great Britain within the past ten or fifteen years. During this period it has swept over the country with remarkable rapidity, and shows no signs of abatement. Nowhere is there any general demand for a return to private operation of water, gas, or street-railway enterprises, and only in occasional instances have communities abandoned their electric-lighting enterprises.

In a certain sense the starting point of the present phase of the movement was the successful experiment of Glasgow in the operation of her street railways, which the city took over in 1894. Other



cities followed her lead with very general success. The municipalization of the street railways was rendered the more natural by virtue of an act of Parliament, passed in 1870, known as the Tramways Act, which authorized the local authorities to lay tracks and then lease them to a private company for operation. At the end of twenty-one years the cities had power to operate the enterprise themselves. Such leases were very generally made in the seventies and eighties, and the systems were worked as horse-car lines. The private companies rarely, if ever, equipped them with electricity. During the last ten years these leases have been terminating. Coincident with their termination electricity began to be generally recognized as the proper method of propulsion. These two facts—the short-term franchises, together with the application of electricity to street-railway operation—made it an easy as well as a natural matter for the cities to enter the field. The companies could not afford to equip the lines with electricity under their expiring grants. In consequence the service deteriorated. The cities were then unwilling to grant new leases to companies which they felt had misused their powers, even though the failure of the companies to properly equip their systems was due to their inability to meet the financial burdens incident to the reequipping.

The act of Parliament authorizing electric light and power enterprises unexpectedly operated in the same way. All franchises or working powers for private corporations must be obtained from Parliament; they can not be granted by the town council. The cities have no legal control over franchises, except in the case of street railways, and even in this case it is of a negative sort. The Electric Lighting and Power Act gives the private companies franchises which are virtually exclusive for forty-two years. When private corporations sought powers to operate, the cities rushed to Parliament to prevent them. In order to do this they had to get the powers themselves; but to hold the powers they had to act. Hence some towns erected lighting plants in order to escape being turned over to a private company. Other cities, like Liverpool, Sheffield, and Birmingham, permitted private companies to enter unopposed. They soon saw the business growing rapidly. As the enterprise became established the franchises increased in value. Many towns, feeling that the business must be eventually taken over, and seeing that the franchises were increasing in value from year to year, entered into negotiations with the companies, and paid immense sums for the franchises in order to anticipate their further increase in value.

These facts explain in a measure why municipal ownership has proceeded with so much rapidity within recent years. Other causes are also operative on public opinion. The general reasons assigned in



Great Britain for this growth may be classed under four heads, as follows:

First. A desire for better and more efficient service. It was felt that private ownership, interested, as it was, only in dividends, could not be relied upon to operate enterprises so as to produce the largest social results. With this was the belief that under public ownership rates and charges could be reduced to the consumer and that the earnings could be used for the betterment of the service or the lowering of its cost.

Second. These enterprises were felt to be essentially public in their nature, because of their monopolistic character and the lack of that competition which secures efficiency in other industry. Moreover, they are identified with the city in many ways. The life and comfort of the people, as well as the proper administration of the city's departments, are dependent upon water, light, power, and transit. All of these services use the streets. In order to prevent friction it was felt that these enterprises should be under one authority, and that authority, from the nature of things, could only be the city.

Third. The street-railway employees were generally underpaid and overworked. Their hours of labor were from seventy to ninety per week, and wages were low. The condition of the men was constantly under the eyes of the public, and, forming a numerous body, they could and did make their grievances heard.

Fourth. It was felt that the earnings of such industries should go into the public treasury. Every voter in England is a taxpayer or a property owner, and he feels his taxes because he pays directly. Local taxes are largely assessed against the tenant or occupier, and not against the owner. We have no appreciation in America of the commanding interest of the poorest householder or tenant in the tax rate. It is a topic of consuming interest, and the ratepayer and the voter saw in these enterprises a means of relief from a part of their burdens.

### SCOPE OF MUNICIPAL OWNERSHIP.

Within the last ten years public as opposed to private operation has become generally accepted as to water, gas, electric lighting, street railways, and markets. Parliament itself, which has been cautious in its grant of powers, now treats these industries as naturally public ones, and in case of contest the doubt is in favor of the local authority. Active hostility to public ownership is almost entirely confined to the big business interests which suffer through the loss of franchise privileges. All other classes accept municipal ownership much as America accepts the schools, libraries, parks, and water, fire, and police service. But while the principle is almost universally accepted, its application by the individual city is a



question of present expediency, of the price to be paid, or the relationship of the private enterprise already in the field to the community.

The extent to which municipalization has extended in the more important services appears from the following table. This indicates the number of public and private undertakings in Great Britain, together with the capital invested by each. The figures are the most recent available. In most instances they are for the year 1903.

NUMBER OF PUBLIC AND PRIVATE WATER, GAS, ELECTRICITY, AND STREET-RAILWAY UNDERTAKINGS AND TOTAL CAPITAL INVESTED IN EACH CLASS.

Kind of enterprise.	Public undertakings.		Private companies.	
	Number.	Total capital.	Number.	Total capital.
Water .....	1,045	\$330,914,491	251	\$197,850,964
Gas .....	256	173,919,089	454	375,348,459
Electricity .....	334	<sup>a</sup> 155,728,000	174	<sup>a</sup> 133,828,750
Street railways .....	142	119,061,278	154	83,660,551
Total .....	1,777	779,622,858	1,033	790,688,724

<sup>a</sup> Approximate.

Since the above date many electricity undertakings have been opened by local authorities, while a number of street-railway lines have passed from private to public control.

An analysis of the returns shows that London has municipalized water, the Thames steamboat service, and surface tramways. The gas, subway, and bus systems are still in private hands. Out of the 29 administrative areas of London endowed with certain municipal powers 14 have taken over the electricity supply, while 15 private companies have been granted franchises within the metropolitan area. Outside of London the town of Newcastle-upon-Tyne, the Newcastle district, Bournemouth, and Preston are the only local areas of any magnitude supplied by private electric-lighting companies. Practically all of the large cities, with the exception of Edinburgh, Dublin, and Coventry, both own and operate their traction systems. Sheffield and Liverpool are among the few large cities outside of London which are supplied by private gas companies.

Municipal ownership in Great Britain has become an issue of wider scope than the ownership and working of street railways, gas, electric lighting, and water services. These so-called natural monopolies have been very generally taken over by the cities. But the movement has not stopped there. In various places it has come to include municipal dwellings, docks, markets, and baths, race courses, oyster fisheries, slaughterhouses, milk depots, employment bureaus, and sewage farms. The Brighton corporation owns the local race course, from which it derives a revenue of from \$10,000 to \$15,000 a year.

Municipal theaters have been opened at Brighton and Southborough. West Ham manufactures its own paving stones and sells them to contractors at a profit. Colchester has a municipal oyster bed. Manchester produces soap, oil, tallow, and mortar as residuals from its gas and other industries. Many cities supplying gas deal in stoves and gas fittings. Others, dealing in electricity, wire the houses and supply them with fittings. Southport and Bradford are advocating municipal tailoring establishments to manufacture the uniforms of town employees.

In some of the northern districts of Great Britain proposals have been advanced that the municipalities should buy up coal mines for the supply of their industries and the relief of consumers. Municipal insurance schemes are finding favor, and there is considerable agitation in behalf of municipal savings banks and brokerage establishments for the disposal of local securities. A number of cities supply sterilized milk for children, and the ultimate municipalization of the entire milk supply is being urged. Glasgow maintains an institution for the cure of inebriates. Wolverhampton sells ice to the traders of the town. Most of the cities own markets which yield a large revenue. Torquay breeds rabbits on a water preserve and enjoys therefrom a revenue in reduction of the rates; the city has also undertaken sheep farming. Tunbridge Wells grows hops for sale. Liverpool cultivates beets. Many cities operate large sewage farms on which are grown supplies for the fire, police, and other departments. The town council of Glasgow has acquired a number of large halls where concerts and entertainments are given. Music in the parks is very generally provided in a number of cities. Baths have been established in a number of towns.

In Great Britain, as in America, free libraries, schools of art, museums, and technical schools are widely promoted. The vestry of Battersea boasts a polytechnic school, which holds evening classes in art and domestic industry. It also maintains an orchestra. The institution is managed much as is a city club.

This growth of municipal ownership has aroused criticism, and exhaustive parliamentary investigations have been made, inasmuch as the dependence of the city upon Parliament makes the question one of imperial concern.

Throughout Great Britain there are three prevailing points of view on the subject of municipal ownership, representing three classes of opinion.

There are those whose interests lead them naturally to oppose all such activities. This class, while limited in numbers, is very influential in Parliament. It includes the steam railways, whose local business suffers by the extension of municipal enterprise; the bankers



and the brokers, whose business interests lie in the promotion and underwriting of large enterprises, and the electric lighting, power, and street railway interests, whose hopes for further franchises or privileges are threatened or whose existing grants are jeopardized. These interests are strongly represented in both political parties; they exercise great influence with the press, and in a general way they are responsible for most of the organized opposition to municipal ownership.

The second class, and a far larger one, is composed of those who would limit municipal enterprise to the so-called natural monopolies, viz, the street railways and the gas, water, electric light, and telephone undertakings. Speaking broadly, this class has been identified with the movement which has brought about the public ownership of these industries. It defends the present extension of the above-noted municipal activities on the ground that the industries already taken over are monopolies which supply services of necessity to all the members of the community. This class resents and joins in opposing any extension of public enterprise into the competitive field as an abandonment of the proper line of demarcation between things which should be done by the public and those which should be left in private hands.

The third class makes no such distinction. It is constantly seeking to extend the field of public enterprise. It has been identified with the big enterprises which the London County Council has undertaken in recent years, such as the Education Acts, the slum clearance schemes, the taking over of the tramway lines, and the establishment of a municipal steamboat service on the Thames. It has also sought powers to open milk depots and municipal bureaus for public employment and to acquire control of the water supply. Under the direction of this party the Council has opened works for the execution of municipal undertakings by the direct employment of labor; it has built model dwellings, and has taken advantage of all the powers which Parliament has accorded the municipality.

Allied with this general programme of enlarged municipal powers are the advanced liberals, the municipal socialists, and a considerable group of workingmen, who are becoming a conscious political power in many cities and boroughs. This is especially true in Battersea and West Ham. It is somewhat true in Glasgow, Sheffield, and many other industrial centers. The ultimate programme of this advanced party is to enlarge the activities of the city and gradually to take over one enterprise after another as rapidly as the city justifies its capacity for so doing.

## CRITICISMS OF MUNICIPAL OWNERSHIP.

The opponents of public ownership are concerned chiefly with the street-railway and electric-lighting enterprises. The water supply has already been very generally taken over, as have most of the larger gas plants. In these latter undertakings, because of the fact that the franchises held by the private companies are not limited in time, the local authorities are required to pay generously for the franchise value. This is usually determined by a capitalization of the net earnings, with something added for "compulsory purchase." The result is that the private companies are well paid when they retire. Parliament rarely, if ever, authorizes competing gas or water enterprises. Thus the companies are fully protected both from purchase and from competition. The hostility to public ownership of gas and water services is therefore not so keen.

This is not true as to electricity or street-railway undertakings. They are subject to purchase at certain intervals at the structural or replacement value. The franchise period is 42 years in the case of electricity companies, and 21 years in the case of street railways. Moreover, electricity and street-railway enterprises are largely controlled by a single company which operates undertakings all over Great Britain. These interests are easily organized for the purpose of protection and are strongly represented in Parliament. Moreover, the street railways are offering competition to the steam-railway service, and a common interest draws all these classes together.

The attacks on municipal ownership led to the appointment of a joint committee of Lords and Commons in 1900 to investigate the question. Many sittings were held, and a large amount of testimony was taken, both favorable and unfavorable to municipal ownership.<sup>(a)</sup> This committee was subsequently reappointed, and made a second report in 1903. It failed to make any definite finding, either favorable or adverse, although it did make some recommendations as to the keeping and auditing of municipal accounts.

The strongest expression of the opposition to municipal ownership is found in a series of seventeen articles published in the London Times in the latter part of 1902.<sup>(b)</sup>

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<sup>a</sup> The testimony so taken and the findings of the commission are given in two reports from the Joint Select Committee on Municipal Trading, published in 1900 and 1903.

<sup>b</sup> These letters have been republished in pamphlet form by the London Times. In the *Contemporary Review* (July 1900, vol. 78, p. 28) is an article by Lord Avebury (formerly Sir John Lubbock), which embodies in vigorous terms the case against municipal ownership.

In the *Statistical Journal* for 1900 (vol. 63, p. 383) is an address of Sir



The general conclusions of the Times articles are as follows:

1. That the growth of a huge local debt, which threatens to attain the same proportions as the national debt, constitutes a source of possible danger to the finances of the country.

2. That partly on account of these undertakings and partly on account of the rapid advances of local expenditure all along the line, the taxes are advancing at a rate that constitutes a considerable burden on the community.

3. That this burden is at present especially felt by manufacturers, industrial companies, traders, and property owners, but must eventually fall upon the working classes in the shape of higher rents, lower wages, and an increased cost of commodities.

4. That many boroughs, cities, and smaller communities are threatened with financial trouble at no distant date by reason of the excessive expenditure by their local authorities.

5. That the extent to which the principle of municipal ownership has been carried by local authorities is, whether intentionally or not, in strict accord with the aspirations of avowed socialists in their desire to secure the creation of a collectivist state and the transfer to the popularly elected body not only of all "public services" but of innumerable trades and all the means of remunerative employment.

6. That there has been already spread throughout the land by socialists, trade-unionists, and others a network of organization which aims at either the capture of municipalities or the attainment through them of sufficient power to secure "in the interest of socialism" an unlimited expansion of the principles of municipalization and direct employment as a stepping-stone to the realization of the socialist programme.

H. H. Fowler, president of the Royal Statistical Society, which examines the increase in local indebtedness and taxation.

The report from the Joint Select Committee on Municipal Trading was discussed in the *Edinburgh Review* of October, 1900.

A similar discussion on the subject is to be found in the *Quarterly Journal of Economics* (vol. 15, p. 460) by Professor Ashley, also in the *Journal of Political Economy*, by Henry Johns Gibbons (Vol. IX, p. 258).

Hon. Robert P. Porter, Director of the Eleventh Census of the United States, read a paper before the British Association at Belfast adverse to municipal ownership. A report of the paper appeared in the *London Times*, September 15, 1902.

Free literature adverse to municipal ownership is also distributed by the Industrial Freedom League, London.

Current information of the extent of municipal ownership is to be found in the *Municipal Journal* (London) and in the *Municipal Year Book* (London), which is published annually and contains an immense amount of statistical and other data on the subject. Several articles of great value may be found in the publication known as *Municipal Affairs*, published by the Reform Club, New York. This publication has been discontinued.

7. That while, in the case of some of the large towns and elsewhere, municipal undertakings may be properly conducted along wise lines, municipalization generally has been carried to excessive lengths, especially in the case of smaller communities or of those where there is a lack of capable business men on the local bodies.

8. That undertakings in the hands of local authorities which year after year are being made to show profits on operation are practically unsound, and must, if matters are allowed to pursue their present course unchecked, inevitably in the course of time end in utter collapse.

9. That many local governing bodies have in their employ large numbers of their electors, who can not only exercise an important influence at town meetings, at elections, and on individual members, but form trade unions among themselves, are in association with the general trade-union movement, and do all they can to advance trade-union interests.

10. That the efficiency of local governing bodies, instead of being increased in proportion to the magnitude of the duties undertaken, shows too often a distinct falling off, so that if it be regarded as right and proper that such bodies should take over commercial enterprises, it is still to be shown that their members are personally equal to the task.

11. That the increasing magnitude of the enterprises and the decreasing efficiency tend jointly to develop an all-powerful bureaucracy.

In addition to this, the general complaint is made that it is the duty of the local governing body to govern and not to trade; that the extension of public activity is rapidly usurping the functions of the private trader; that the growth of local debt and taxation are injurious to the trade of Great Britain in competition with other countries, and that new enterprises are constantly being entered on without sufficient consideration or reflection. Further than this, the danger is pointed out of attempting through public agencies, subject only to the ballot, enterprises which require skillful administration and which can best succeed under the spur of individual gain.

## CRITICISMS OF MUNICIPAL OWNERSHIP EXAMINED.

Just as the criticism of municipal ownership has been expressed by summarizing the arguments of its opponents, so these criticisms may best be examined by giving in reply briefly the statements of its advocates in Great Britain.



**THE INCREASE OF LOCAL INDEBTEDNESS.**

The extension of municipal activities is graphically indicated by the increase of local indebtedness. This increase in recent years has been tremendous, whether or not it warrants the concern which has been manifested by the critics. According to an address presented to the Royal Statistical Society in 1900 by Sir H. H. Fowler, its president, the local debt of the country had increased from £92,820,000 (\$451,708,530) in 1875 to £262,017,000 (\$1,275,105,731) in 1898.<sup>(a)</sup> The net increase was £169,197,000 (\$823,397,201). Of the total debt in 1898, £87,581,000 (\$426,212,937) was incurred for reproductive municipal undertakings. The balance of the indebtedness was for education and sanitary purposes, or was forced upon the local authorities by act of Parliament.

Thus the figures show that, of the local indebtedness so created, at least two-thirds was for purposes other than trading. Aside from the obligations created by Parliament and imposed upon the local authorities, the demands of education, of sewage disposal, of housing and slum clearance, of baths, of parks, libraries, and street widening, all due to the growing concern of the city for the comfort, convenience, and health of the people, as well as the insistent necessities of an increasing urban population, greatly increased the local indebtedness, as well as the tax rate.

Since 1898 local borrowing has continued unabated. In 1900 new indebtedness to the extent of £24,500,000 (\$119,229,250) was created, a sum more than double that of any previous year. By 1903 the indebtedness of the various municipalities in the United Kingdom, as shown by the latest local taxation returns, was £442,471,246 (\$2,153,286,219).<sup>(b)</sup> Between 1875 and 1904 the increase in the per capita local debt was from twenty to fifty dollars.

The advocates of municipal ownership have pointed out in reply to the criticism under discussion that local indebtedness due to municipal ownership can properly be a source of concern only in case the proceeds of loans have been fraudulently or carelessly expended, or the cities are incurring expenses in the operation of the services which must be borne out of the tax rate. As to such indebtedness the statistics are fairly complete. They are obtainable from the Board of Trade returns and other authorities.

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<sup>a</sup> See Journal of the Royal Statistical Society, vol. 63, p. 383.

<sup>b</sup> See Municipal Journal, November 10, 1905.

Up to 1903 the total capital outlay by the local authorities of the United Kingdom for the chief reproductive undertakings was as follows:

NUMBER OF UNDERTAKINGS OF LOCAL AUTHORITIES AND TOTAL CAPITAL INVESTED IN EACH CLASS, 1903.

Kind of undertaking.	Number of under-takings.	Capital invested.
Water.....	1,045	\$330,914,491
Gas.....	256	173,919,089
Electricity.....	334	155,728,000
Tramways.....	142	119,061,278
Total (a).....	1,777	779,622,858

<sup>a</sup> The Board of Trade returns do not include water undertakings for Scotland and Ireland, nor do they report all of the gas undertakings in Great Britain. The data as to these enterprises are therefore taken from the Municipal Year Book, 1905.

The present indebtedness against these enterprises is somewhat less than the capital expenditure. The local authorities have already repaid a considerable portion of the indebtedness out of earnings. Statistics of debt repayment for the entire United Kingdom are not available. But the results of an inquiry in England and Wales, brought down to March 31, 1902, as given in the following table, shows the capital borrowed and repaid out of the earnings of the municipal undertakings in those countries. This table, it should be pointed out, covers municipal boroughs or corporations only, and does not include the undertakings of other local authorities, as does the preceding table.

CAPITAL BORROWED AND REPAID OUT OF EARNINGS BY MUNICIPAL UNDERTAKINGS OF EACH CLASS IN ENGLAND AND WALES TO MARCH 31, 1902.

[From Sir Henry Fowler's "Return of the reproductive undertakings carried on by municipal boroughs (ordered by the House [of Commons] on the 4th day of August, 1898), brought up to the 31st day of March, 1902." Undertakings which had on March 31, 1902, been carried on for a period of less than 12 months are not included.]

Kind of undertaking.	Number of bor-oughs.	Capital bor-rowed.	Capital re-paid out of earnings.	Balance of indebted-ness to March 31, 1902.	Amount in sinking fund or loan fund March 31, 1902, for cap-ital account.
Waterworks.....	193	\$273,340,983	\$32,173,220	\$241,167,763	\$8,167,627
Gas works.....	97	110,748,994	20,730,487	90,018,507	6,492,286
Tramways owned and worked by municipality.....	29	40,862,682	2,290,890	38,571,792	1,793,106
Tramways owned by municipal-ity but leased and worked by private companies.....	16	5,095,284	1,946,941	3,148,343	
Electricity supply.....	102	57,253,024	2,783,365	54,469,659	1,939,962
Total.....	437	487,300,967	59,924,903	427,376,064	18,392,981

From this table it is apparent that the cost of the reproductive undertakings of the municipal boroughs is being more or less rapidly reduced. Already, out of the earnings, £12,313,758 (\$59,924,903) of indebtedness has been retired, while £3,779,509 (\$18,392,981) is held in sinking funds for the further reduction of the obligations



against the plants. Thus 24.58 per cent of the total capital borrowed for the gas works and 14.76 per cent of the amount borrowed for waterworks has already been repaid or provided for in the sinking fund. Street-railway and electricity undertakings are of more recent acquisition, and their debt repayment is, in consequence, not so large.

INCREASE IN TAXATION.

It is frequently urged in the discussion of municipal ownership that it involves a burden on the taxpayer, and for this reason is oppressive to British industry and labor. The advocates of municipal ownership say that the reverse is true. Local rates or taxes in Great Britain have increased in recent years, they admit; but this is attributable to improved sanitation, to expenditure for schools, health, parks, and slum-clearance schemes, which have been everywhere rendered necessary by the conditions of city life. Moreover, it is pointed out that many of these burdens were imposed upon the cities by act of Parliament, regardless of local wishes in the matter.

The reproductive undertakings are rarely a burden on the tax rate. While it is not uncommon for local taxes to be levied for water purposes, as well as for street lighting, it is also true that many other cities make no charge for water or gas used in a public way. The return of the reproductive undertakings carried on by municipal boroughs (ordered by the House [of Commons] on the 4th day of August, 1898) brought up to the 31st day of March, 1902, known as Sir Henry Fowler's return, showing the average annual income and expenditures of the leading municipal enterprises in England and Wales for four years ending March 31, 1902, was as follows:

AVERAGE ANNUAL INCOME AND EXPENDITURES OF MUNICIPAL WATER, GAS, AND ELECTRIC PLANTS AND TRAMWAYS IN ENGLAND AND WALES, APRIL 1, 1898, TO MARCH 31, 1902.

[From Sir Henry Fowler's "Return of the reproductive undertakings carried on by municipal boroughs (ordered by the House [of Commons] on the 4th day of August, 1898) brought up to the 31st day of March, 1902."]

Kind of undertaking.	Number of boroughs.	Average total annual income.	Average annual working expenses.	Average total annual income less working expenses.	Average annual payments out of income—			Average annual net profit.
					On borrowed capital.	Of interest on borrowed capital.	Set apart for depreciation.	
Waterworks .....	193	\$15,509,365	\$5,616,958	\$9,892,407	\$1,923,231	\$7,397,873	\$132,690	\$438,608
Gas works .....	97	28,388,046	21,731,964	6,656,082	1,369,268	2,976,215	389,184	1,921,415
Electricity supply .....	102	5,530,558	3,224,343	2,306,215	996,353	1,269,650	97,184	a 56,972
Tramways owned and worked by municipality .....	29	6,788,403	4,728,048	2,060,355	638,680	782,713	240,376	398,586
Tramways owned by municipality, but leased and worked by private company .....	16	430,160	142,885	287,275	119,054	79,032	4,443	84,746
Total .....	.....	56,646,532	35,444,198	21,202,334	5,046,586	12,505,488	863,877	2,786,383

a Net loss.

The average annual excess of net profits over net losses for the total 437 undertakings according to the above official report was £572,564 (\$2,786,383). The net profits were in most cases applied to the relief of local taxation. The electricity plants make the least favorable showing from this point of view. A considerable number of the more recent and smaller ones have shown a deficit upon the yearly operations when allowance is made for interest, depreciation, and sinking-fund repayments. Several tramway lines of comparatively short mileage also show deficits in their workings.

In the matter of the water supply the policy of public operation has been so long accepted that but little criticism is heard, although some of the larger enterprises receive very substantial aid from taxation. This is due to the fact that Parliament has emphasized their public service to the health and cleanliness of the community, and made provision for their partial maintenance out of a general levy.

In the discussion of the question of cost to the taxpayers, model dwellings, baths, cemeteries, and similar enterprises are often included as trading enterprises, and their shortage charged up in a grand total against the purely commercial undertakings. As a matter of fact, these undertakings are not conducted as trading enterprises, nor is it intended that they shall yield a commercial return. The strictly reproductive undertakings, as water, gas, electricity, and tramways, are but rarely a source of burden to the taxpayers, and where this is true it is usually only in the earlier years of their operation.

In order to comprehend the English system of local taxation, or rates, as they are called, it is necessary to know that the basis of assessment is the income of property rather than its capital value for the purpose of sale. In other words, the tax rate is levied on income rather than on the capital value. For instance, when it is stated of a city that the "total average rate is 4s. 9d. in the pound," it is meant that for every pound of rental value the tax assessed is 4s. 9d., or about \$1.16. To make a concrete comparison, a tax rate of 4 shillings on the pound is equivalent to one dollar on five dollars. In America such a rate would amount to a tax of 1 per cent upon the full capital value of the property, assuming that property rents on a 5 per cent basis. On the same assumption a rate of 4s. 9d. would be equivalent to a tax rate of \$1.1875 per \$100 of capital value.

In the case of unimproved property, if it lies vacant it pays little or no local taxes. This is practically true of all of the unoccupied property within the city as well as the undeveloped land in the suburbs. Various bills have recently been before Parliament to correct this exemption and place unimproved land upon the tax duplicate.



In passing on the question of profits or deficits it is necessary to bear in mind that the municipality is required by Parliament not only to meet the ordinary working costs and interest on the indebtedness of an enterprise, but also to set aside each year a fund which at the end of a certain period will repay the entire debt. This is an added charge on the enterprise, and must be met from the beginning. The period of debt repayment ranges from 25 to 60 years, according to the nature of the undertaking. The usual period is 30 years, and the annual charge on the earnings is therefore somewhat under 3 per cent on the capital. This is in addition to the interest account. The total dividend to be earned, therefore, amounts to about 6 per cent. So that when it is stated that a loss is made it means a failure to meet all of these obligations. In addition to this, reproductive undertakings owned by the city pay taxes the same as though owned by a private company. It has been the policy of Parliament to place the public enterprise on the same basis as the private one, so that the operating expense account includes an expenditure for local as well as national taxation. Thus the Glasgow tramways paid in local taxes in 1905 the sum of £38,782 (\$188,733) and £5,434 (\$26,445) as an income tax to the imperial exchequer.

In the large towns the street railways, gas, water, electric lighting, and markets rarely, if ever, show a deficit. The complaint is more frequently made that they make too large a profit out of the consumer and use the net earnings to relieve taxation rather than reduce the price or charge to the user. This is one of the issues in local politics. It is constantly being discussed in the town councils. The attitude of the local authorities is one of extreme caution, of fear of establishing a rate or price so low that the enterprise may be forced to call upon the taxpayers. This apprehension has led to very conservative management.

#### **MUNICIPAL ACCOUNTS.**

The charge is made by the opponents of municipal ownership that municipal accounts are "cooked," or at least misleading, and that the showing of earning power made is brought about by improper entries in the bookkeeping. An inquiry as to the validity of this charge was made at the Board of Trade, which is one of the cabinet departments intrusted with the control of municipal enterprises. The authorities at the Board of Trade repudiated this charge as untrue, and stated that the audit of these enterprises, so far as it extended, was very complete. All county councils, the London borough councils, and urban district councils are subject to the audit of the official auditors of the Local Government Board. The accounts of municipal boroughs or corporations are subject to the audit of two elective citizen auditors and a member of the town council appointed by



the mayor, who go over the accounts and expenditures of the various departments. Many cities also employ a permanent expert accountant as auditor, and keep him on the books of the corporation. Any irregularity would thus be very readily discovered, for the audit in many instances is so careful in its scrutiny as to seem almost petty. Moreover, the accounts of the departments are published in voluminous reports, which are easily obtained. The technical papers are filled with their returns, and the local taxpayers' organizations and hostile interests are quick to detect any error, improper expenditure, or misleading statement. The gas, water, and tramway returns are also sent to the Board of Trade and Local Government Board for examination and publication.

When criticisms of improper accounting are made, it not unusually means that some item of personal service, such as engineering, book-keeping, or attorneys' fees, was not apportioned to the particular enterprise. Thus, the complaint has been made by critics that the city engineer was the technical official of all its departments, but that the trading enterprises which used his services largely paid no part of his salary. In another case, it was said that the town clerk, a salaried official, was used as the parliamentary agent of the tramway department. Again, it was charged that the bookkeeping, instead of being done by the department itself, was carried on the pay rolls of the town clerk's department. Such criticisms as these, when examined, are frequently found to be reducible to comparatively insignificant items. The officials referred to would be required by the cities, whether or not they operated municipal plants. It is not generally charged that their salaries have been increased on account of the municipal plants, and even if they have, the extra part of salary assignable to these plants would not make sufficient change in the figures to be of consequence. When the general charge of improper accounting is made it carries an undue emphasis to American ears, accustomed to attach much graver significance to such complaints. For this reason such charges, unless analyzed, are likely to be very misleading. But no instances were found of malfeasance, of improper entries, or of willfully false or misleading statements for the purpose of showing an untrue balance for an undertaking. In fact, in the face of the constant checks and audits, as well as the widespread publicity of municipal undertakings, such entries would be very difficult.

#### **INCREASE IN MUNICIPAL EMPLOYEES.**

The growth in the number of city employees has been looked upon in some quarters as a cause for disquiet. This has been adverted to by a number of mayors and public officials. It has been tentatively



suggested that the employees should be disfranchised in order to minimize their influence in elections. Thus far the fear of such activity has not been justified. The city of Glasgow has from 15,000 to 16,000 employees in all of its departments. This is one-tenth of the voting population. A study of this question there, among the heads of the various departments, disclosed some apprehension, but little as yet to justify it. While officials admitted that this was a hazard incident to municipal undertakings, no instances had as yet arisen in which the employees had organized in a political way to promote their demands, and no case was cited in which the labor unions had ever attempted to control a department. As a rule the skilled artisans in the city employ are unionized; the unskilled ones, the motor-men, conductors, street gangs, gas, and water employees, are not. Efforts to unionize the latter class of employees have not generally succeeded. Instances were cited of complaints being lodged by the unions of the failure of cities or contractors to observe the "fair," or union, wage schedule. But the cities have been quite as zealous as the unions themselves in maintaining the trade-union standard, even in the unorganized trades. As a rule the wages, hours of labor, and conditions of employment under municipal control have been greatly improved. Along with this has grown up a jealous watchfulness on the part of the public, which would not tolerate any influence from its employees or efforts to exploit a department. The men themselves seem to recognize their official position, and as the public service is much sought after they are careful not to put their positions in jeopardy.<sup>(a)</sup>

#### **MUNICIPAL OWNERSHIP AS RELATED TO SOCIALISM.**

Comparatively few persons look upon municipal ownership as the beginning of a programme of ultimate socialism. It is true that the Fabian or evolutionary socialists have not only been identified with its progress, but are active in its further extension. Their early efforts were identified with municipal ownership, and their ultimate ideal is a sort of municipal republic endowed with large powers and using them for the promotion of the well-being of all classes. At the present time their efforts are being devoted to the still further extension of municipal activity in the line of education, in the supply of milk, bread, and coal, and in the development of housing schemes for the poorer classes.

But the municipalization of the natural monopolies, while approved by the socialists, has had the active support of millions who were neither identified with nor in sympathy with socialism. It is more largely a movement of the tax-paying and commercial classes,

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<sup>a</sup> For a full discussion of The Municipality and Labor see pp. 65 to 77.



inspired by a belief in the city, a desire for better service and greater conveniences, as well as a zealous conviction that the city should own and operate all enterprises of a monopolistic character. The extent to which idealism or philanthropy cooperates with thrift in the movement can not be accurately measured. But it is certain that municipal ownership has gone on most rapidly in those cities where the commercial classes are most powerful in local politics. The average alderman treats municipal ownership as good business, and points to the reduction in charges, the improved service, and the satisfactory balance sheet in justification of the experiment.

### DEFENSE OF MUNICIPAL OWNERSHIP.

The literature of municipal ownership is found in municipal reports, in parliamentary returns, and the daily press.<sup>(a)</sup> The justification of the extension of municipal activities, as set forth by its advocates in these writings, as well as in the comments of officials and the people, may be summarized under six general heads, as follows:

First. That municipal ownership stimulates public spirit, promotes good citizenship, and arouses a sense of local patriotism growing out of the services which the city extends to the citizen.

Second. That public operation is alone consistent with the best interests of the community. It permits city administration to be coordinated, and the service of the tramways, electricity, gas, and water undertakings to be made to serve one another and the community.

Third. That public ownership has greatly cheapened the cost of service, whether in water, gas, electricity, or transportation. The same is true of telephones.

Fourth. That municipal ownership has proved a financial success; already in many cities it has out of its earnings paid off a part of its indebtedness, and in many instances contributed to the reduction of the local taxes.

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<sup>a</sup> The following are references to the more accessible literature favorable to trading:

The Municipal Year Book, London.

The Municipal Journal, London.

Does Municipal Ownership Pay? Clarion Press, London.

The Common Sense of Municipal Trading, by Bernard Shaw, London.

To-Day's Work. George Haw, London.

Publications of the London Reform Union.

The London Program. Sidney Webb, London.

Municipalities at Work. Frederick Dolman, London.

Municipal Enterprises of Glasgow, Glasgow.

Contemporary Review, May, 1903.



Fifth. That municipal ownership has improved the condition of labor by increasing wages, shortening hours, and establishing cordial relations between the public and its servants.

Sixth. That in addition to this, public operation is subject to public opinion; that every voter is a critic and can make his influence felt upon service and conditions; that this makes the industry responsive to the needs of the community in a way that is never true of private operation.

As to the assertion that public ownership has promoted better citizenship and stimulates interest in local affairs, the stranger can only rely on the testimony of officials and citizens.

On this point corroborative testimony comes alike from the ranks of both the Conservative party and the labor party. Sir John Ure Primrose, a Conservative and the lord provost of Glasgow, asserts that municipal ownership is the chief cause for the civic enthusiasm of that city, while Mr. John Burns, M. P., the well-known labor leader, a member of the London County Council since its organization, and now a member of the Liberal ministry, says: "Municipal ownership is mainly responsible for the civic renaissance that is so marked a feature of English local government in the last ten or fifteen years."

Public ownership has promoted citizenship, it is asserted, by destroying class antagonism. By removing franchise privileges from politics, it has destroyed that source of corruption and has united the rich and the poor in a common demand for honest government, as well as cheap and efficient service, and has turned every citizen alike into an effective critic.

The tramways, coming in close and intimate touch with the people, stimulate an interest in the city that is almost universal. The change from private to public operation has apparently always been followed by a marked increase in their use by the community. The most aggressive, the most active, and the best-governed cities from the point of view of the average Englishman are the cities that have gone in for municipal ownership. Glasgow, Liverpool, Manchester, Sheffield, Bradford, Leeds, and Birmingham are examples. The London County Council also has been most aggressive in the enlargement of its functions and activities.

Corruption is practically nonexistent in the British city. There have been instances where the city acquired reproductive undertakings from private owners at prices in excess of their fair value. This has been due to the laws regulating purchase and occasionally to an identity of personnel of municipal officials and private interests. But such instances as the latter are very rare, and public opinion is alert in its criticisms of values allowed on such appropriation proceedings. Occasional instances have been disclosed of council officials, such as



clerks or engineers, who have received bribes from contractors or have embezzled funds. These are equally rare, and have been followed by severe punishment. But the collusion of town councilors with business interests by bribery or otherwise is of such infrequent occurrence as to be almost, if not quite, unknown. Following upon some charges of personal interest on the part of town councilors, as well as the pamphleteering of hostile interests against municipal ownership, extensive local investigations were made by probing committees in 1900 and 1901. The net results of these investigations are summarized by Mr. Robert Donald, the editor of the *Municipal Year Book*, in the *Contemporary Review* for May, 1903. Among the more serious findings were the following:

An elective auditor at Darwen demanded the resignation of a councilor because he held a share amounting only to five pounds [\$24.33] in a limited company doing business with the corporation. The member did resign. Blackpool instituted an inquiry, covering a period of three years, and found that three members of the council were directors of limited companies which had dealings with the corporation, amounting to a total of thirty-two pounds [\$155.73], and that two members had subcontracts in the building of the town hall. The finance committee of the Leeds city council held a thorough investigation into charges against members for trading with the council. A number of instances of members supplying goods as subcontractors was revealed, and one councillor had supplied direct. All the goods were supplied under tender, so that the council presumably lost nothing in accepting the lowest.

A number of similar instances came to light through these investigations, but all seem to have been of the same character, namely, officials having interests in subcontracts or being owners of shares in corporations having dealings with the city.

As indicative of the intolerance of any interest adverse to the public, the case of Alderman Higginbottom, of Manchester, is cited from the above article. Mr. Higginbottom was chairman of the electricity committee. He was a partner in a firm of electrical engineers. His firm had acted as a subcontractor to contractors dealing with the city. The above article continues: "The corporation found that Alderman Higginbottom's action with respect to all the subcontracts entered into by his firm [amounting in all to £4,329 (\$21,067)] had been altogether improper and such as they could not justify, having regard to his position on the electricity committee, on the gas committee, and as a member of the city council." The alderman resigned. "There was no suggestion that the city had lost, as all the supplies are by tender, and the lowest was invariably accepted."

Repeated inquiries in all quarters, as well as personal investigation of many of the largest cities of the United Kingdom, confirm this statement as to the absence of corruption, and reveal an amazing degree



of self-sacrifice and arduous labor on the part of the members of the councils, all of whom serve without remuneration and many of whom give up at least one-half of their time to the work of the city.

The motive of municipal ownership is social rather than industrial; it is a matter of service rather than of relief of taxation; a concern for the welfare of the city rather than a desire to make money. Municipal ownership, its advocates assert, promotes the common weal in many ways. It does this in cheaper fares, longer rides, and better service on the tramways; in cheaper and better gas and purer water; in cheaper and more enlarged use of electricity. It also aids the city in the relief of the tenement population, in the better lighting, sewer-ing, and watering of the city. But beyond this, the city builds for the future. It can carry out its undertakings and control its development with a conscious programme. With all of these enterprises under its control it makes use of them as a manufacturing establishment does its plant. The water and gas mains, electricity conduits, and tramway construction are looked upon as a part of the structure of the city. They form the foundation, the power, the machinery of a private industry. In many cities the tramways and electric lighting plants are coordinated, the lighting plant supplying power to the tramways in the daytime when the lighting load is low. The city can and does promote private industry by cheapened power. The administration of the water supply is a constituent part of health and sanitary administration. The gas is used for the better lighting of the streets and alleyways, thus promoting the convenience of the people and aiding police supervision. Cheap fares open up the country districts to settlement and relieve the poor of some of the burdens of rent. The problem of slum clearance, which is one of the most difficult problems of the British city, is thus simplified. In London the tramways and the steamboat service on the Thames are run together, while the promotion of the use of gas stoves and of prepayment or slot meters lessens the burdens of the poor. By such means as these a conscious programme of city building and development is made possible, for none of these things, it is maintained by the British advocates of municipal ownership, can be accomplished through the regulation of private enterprises.

Moreover, the structural ideas of the city are of an entirely different sort from those of private undertakings. The city builds for the future. It is not limited by a terminable franchise and its plant is permanent. In consequence, its original capital outlay is oftentimes heavier than that of a private company. The aim of the city seems to be to give the largest possible service at the lowest cost consistent with its policy of financing. Larger areas are opened up to service, places where the industry does not at first pay being developed in order to encourage building.



Further than this, when the municipality owns all of its enterprises, the conflicts between public and private authorities are at an end. With private tramways, gas, water, electric-lighting, and telephone companies opening up the streets, conflict and inconvenience are inevitable. The city, however, can coordinate all these things; it can sewer and pave its streets and at the same time lay its tramways, and its gas, water, and electric-lighting mains. A great saving is thus possible and the engineering may be of a consistent kind. The new Kingsway, just opened up at great expense by the London County Council from Southampton Row to Victoria Embankment, is cited as an example of such coordination of work. The new street was a clearance scheme costing in the neighborhood of \$25,000,000. Many buildings were torn down. The street way was excavated to a considerable depth from curb to curb. Under the center a subway was built for electric cars; on either side were built intercepting sewers, and above them were large ducts adequate to carry water, gas, electric-light, and telephone conduits, all accessible for inspection and repair without tearing up the pavement. The street was thus finished from the foundation up at heavy initial cost, but at great saving to the future in maintenance and repair.

Such a conscious programme of city development and social service is possible, it is pointed out, only when all of the necessary services are under the ownership and operation of the city.

The permanency of public construction is due partly to the security of the investment and partly to the fact that the capital which can be secured is not limited in the same degree as in the case of a private company.

Some of the deficits in the early years of municipal enterprises are explained by the heavy initial capital outlay, and the necessity of earning from the start as much as 6 per cent above operating expenses to pay interest and make provision for the sinking fund as required by Parliament.

The capital outlay of all these enterprises is much heavier than in America. In water undertakings this is due to the fact that the cities are dependent upon impounding schemes and have to go to some mountain region to secure an adequate supply. The capital expenditure for the construction of the tramways is also very high. In electric lighting the same is true. All wires are laid in conduits underground. Power stations are erected adequate for future growth, and the installations are generally of a sort involving a heavy initial cost and a low burden for maintenance and repair. While many of the private undertakings are not of so substantial a sort as the public ones, even they are much more costly than is usual in America. This is partly due to British temperament,



which builds for all time. It is also due to the oversight of the Board of Trade, which regulates in great detail the construction by private as well as public companies.

It is further maintained that municipal ownership amply justifies itself from a financial point of view; that the indebtedness incurred is more than offset by the investment made, and that with the gradual repayment of the debt out of earnings the enterprises will ultimately be owned clear of any incumbrance.

All indebtedness incurred must be paid off within a limited number of years, usually about thirty. Parliament has legislated against a permanent local debt. Very substantial progress has been made by many cities in the amortization of the water, gas, and tramway obligations. The value of the assets of the reproductive undertakings is already considerably in excess of their debts owing to this policy, and in the case of tramways and electric-lighting plants the future debt repayment is likely to be much more rapid than it has been thus far, as these industries are just fairly completed. The extent to which this payment of indebtedness has gone will appear in subsequent tables, as well as in the discussion of individual cities.

Several small towns have not been able to meet their sinking-fund charges on tramways out of earnings. A larger number of electric-lighting plants show a similar deficit. This is usually accounted for by the newness of the undertaking and the heavy interest charges at the start.

Many British cities make use of the profits of these industries to reduce taxation. Many of these contributions are very substantial. But the main idea is a cheap service rather than a profit-making venture.

Municipal ownership has greatly improved the condition of employees. All cities appear to pay the standard or trade-union rate of wages. Where no union exists a fair wage is fixed by the city. Tramway undertakings very generally supply free uniforms to the men, allow holidays on pay, and have reduced the hours of labor to nine or nine and a half a day, with one day's rest in seven. The same standard prevails in other departments. The British city aims to be a model employer. Certainly the conditions of the employees on the undertakings taken over have been immensely improved. This subject will be more fully discussed in the section devoted to the municipality and labor.

## CONCLUSION.

A study of the British city, its political morality, financial operations, and social and industrial achievements, reduces the criticisms of municipal ownership to the single one of: "Is it proper for the

public in its collective capacity to engage in business; is it proper for it to trade and serve the public beyond the traditional limits of political service?" The weight of public opinion in Great Britain is that municipal ownership in the concrete has justified itself there, and present criticism is largely resolved into the theoretical one of the proper functions and powers of government. Assuredly municipal ownership has not involved an increase of official corruption. The instances of corrupt dealing between councilmen and those dealing with the city are so rare as to be almost nonexistent. Nor is there any evidence that the increase in municipal employees has led to their tyranny over departments or officials. Municipal employees are not organized to promote their own interests, however reasonable it may be to assume that they would be. Nor is there any evidence that the personnel of the town councils has deteriorated, or that they are incapable of managing such intricate undertakings as those taken over. Of all these criticisms the reverse seems to be true. The interests of the city have become so vast that men of strength and power are attracted to the public service. Similar considerations make the public and the press very alert and awake to municipal business. The doings of the town council and the departments are published widely and are carefully perused. Public spirit is constantly on the lookout to maintain the character of its representatives in the council. At the same time a sense of dignity and self-respect seems to have been bred by the public service among its employees.

There is no considerable sentiment in favor of a return to private operation among any portion of the community, except the very small class interested in private franchises. This is the best test of the success of the movement. For after all, even public trading is a matter of politics, and if public opinion has come to approve of a policy after a sufficient trial, it is a better proof of its permanence and its success than a favorable balance sheet. The taking over of these enterprises is no longer looked upon as a novelty or as an innovation. They have already established themselves as an essential part of municipal administration, the same as the schools, police, fire, health, and other departments. Even Parliament, the personal interest of many of whose members is closely identified with the big business enterprises, has come to recognize the general principle that no private franchise should be granted in an area where the public authority shows a disposition to undertake the enterprise.

Even the argument that public officials, chosen by ballot and subject to recurring elections, are incompetent to manage business enterprises, seems unjustified. For the committees of the council are more or less permanent. They are like the board of directors, serving without pay. They devote themselves with great ardor to their



duties, are keenly alive to new ideas and improvements, are familiar with the progress of their enterprises, and keep in touch with the best results elsewhere. Men are frequently returned to the council without opposition, for ten or fifteen years consecutively, and efficient service on a big committee is recognized by the council and the public.

The same policy governs the councils in the treatment of their employees. Engineers and managers are paid good salaries, sufficient to secure a high order of ability. They are retained for years and are called from city to city, much as are the employees of private concerns. In the management of their departments they are given wide latitude and discretion. The management of municipal undertakings has become a profession. Societies exist for the promotion of municipal matters and a keen spirit of friendly rivalry exists between different communities.

It is asserted that the policy generally adopted by the cities in the management of these enterprises is one of ultra financial conservatism, and that the enterprises are permitted to earn too much money. This seems to be true of some of the tramway and gas undertakings. The depreciation charges, reserve, and debt repayments are too heavy. The present generation is being taxed for the future. In water undertakings, however, the repayment of indebtedness is spread over a longer period.

An examination of the water, gas, tramway, electricity, and telephone undertakings (in so far as the latter have been municipalized) shows that the change from private to public operation has resulted in—

1. Marked reduction in rates and charges to consumers.
2. Greater economy in operation through lower interest charges, and great extension of use.
3. In many instances a considerable relief to the burden of taxation.
4. A coordinated municipal policy by which the city and its undertakings are made to work together and with one another. This is true as to health and cleanliness, in policing and lighting, in the administration of the streets and public places, in the unification of all departments working through the common body—the town council. Friction is eliminated, and one department is made to serve another and the public.
5. A comprehensive housing policy has been rendered possible, and an ultimate relief of the tenement population.
6. The condition of the very poor has been improved through cheap and abundant water, through cheaper and more available gas for lighting and heat, and through cheaper transit.
7. The condition of the employees has been greatly improved. Thousands of men have been raised to a fair wage, and relieved from

the fear of capricious dismissal. Their service has been dignified, and their standard of living improved, not only by better wages, but by shorter hours.

## PARLIAMENT AND THE CITIES.

The British city derives its powers from Parliament, just as the American city does from the State legislature. Home rule exists in a limited sense, but is confined to details of administration. Authority to engage in any enterprise is not a matter of right; it is a privilege conferred only after a searching inquiry. It is this that makes municipal ownership a political issue of national import. Its opponents therefore center the attack at Westminster.

In all municipal enterprises the local authority, the council, initiates the question and applies to the Board of Trade or to Parliament for the requisite power to borrow money and establish the enterprise. Parliament or the Board of Trade investigates conditions, grants or refuses the power, and supervises the financing as well as the construction of the undertaking. This supervision extends to many details of management; it determines the amount to be borrowed, fixes the area to be served, and defines the general character of construction and the method of debt repayment. In some instances Parliament also provides how the earnings shall be applied. In water undertakings the rate which may be charged for water is fixed, as is the source of supply. Parliament passes upon the amount which may be collected by taxation, grants or withholds the right to serve other localities, as well as the right to introduce any improvements. In the matter of gas, the area supplied, the price charged, the candlepower, and the right to engage in the sale of stoves, fittings, or prepayment meters are all fixed and determined in the same way. In electric lighting the same is true. The method of construction is laid down. The rate of charge and even the distribution of earnings is taken from the local authorities, except within defined limits. Tramways are even more carefully watched. The speed is limited. All deaths or accidents are reported, guards and fenders are examined, while such substantial matters as the area to be served, the money to be borrowed, and the method of construction and equipment are all carefully fixed and regulated from above.

The same is true of all private undertakings. The standard is the same in one instance as in the other, although the same provisions as to debt repayment, financing, and the like are not required in the case of private enterprises.

The result of this parliamentary regulation is a high standard of construction, equipment, and service. In many respects the standard is too severe and the cost excessive. But the general result is pure



water, cheaper gas and electric lighting, and a better tramway service than free and unrestrained competition has produced in America.

The authority from Parliament to buy or operate an industry is conferred by a special act, although general acts regulating details and applicable to all communities are from time to time passed.<sup>(a)</sup>

This constant supervision of the city occupies a large share of the attention of Parliament. It also involves a needless and extravagant cost upon the city. Powers are not granted in a liberal way. The city council can not take over an enterprise on its own initiative, or even after a referendum vote by the people. Subsequent to the opening of an undertaking the Local Government Board or the Board of Trade requires detailed returns of many things, and in most instances insists upon an annual audit of the undertaking.

The usual procedure to secure working powers or authority is for the town council to make application to the Board of Trade (a department of the cabinet somewhat similar to that of the Department of Commerce and Labor in America) for a provisional order to go into the business. In some instances the application is made direct to Parliament. In the former procedure the Board of Trade makes an investigation of local conditions, hears arguments or protests from the community, and if it finally approves of the application a bill is introduced into Parliament empowering the locality to act.

This is a very expensive procedure. The cost of the local inquiries, of the printing of testimony, of witnesses, as well as the fees of parliamentary agents or attorneys, is all thrown upon the local body making application. For by a custom almost as binding as law, all parliamentary proceedings are conducted through counsel, and the city seeking power is burdened with an initial expense which often runs into the tens possibly into the hundreds of thousands of dollars.

Following the passage of an act (and no general acts exist under which undertakings can be inaugurated) the city can proceed to sell its bonds by ordinance of the council, and erect its plant, or, as is more often the case, to buy out an existing private company which has previously held a franchise in the locality. This is done by agreement if possible; if not, by arbitration. The latter proceeding is also very expensive because of the cost of referees, of witnesses, and counsel fees. An examination of the budgets of various cities shows the item of parliamentary expense as a constant charge.

Parliamentary oversight does not end with the original grant of powers. Extensions to new territory, any additional borrowing power, any change in traction, any change in the illuminating power

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<sup>a</sup> There is an exception to the rule in the case of telephone undertakings, authority to permit them being lodged in the post-office department.



of gas—anything in fact which materially affects the indebtedness of the city, the service to be rendered, or the area to be supplied with transportation, gas, water, or electricity, must again come before Parliament or the Board of Trade for approval. The local community has a free hand in the details of management, but no authority over the development or alteration of the status of the enterprise.

After an enterprise has been started it is subject to annual report to the Board of Trade. This is true of all water, gas, and electricity undertakings. It is true of almost all tramway enterprises. The purpose of the supervision is to insure compliance with the parliamentary requirements. For when Parliament confers power upon a city it provides in the act that a certain sum shall be set aside each year to repay the debt. This usually amounts to about 3 per cent. By the sinking-fund provision the debt will be retired within thirty years. The period is sometimes longer in the case of more permanent undertakings, such as waterworks and building schemes. By such means publicity is insured in all municipal operations, and the local authorities are held to a certain accountability.

In the matter of electric lighting still further limitations are imposed. Aside from the operating expenses and fixed charges, such as interest, depreciation, and sinking-fund allowances, and the accumulation of a reserve fund amounting to 10 per cent of the capital, the city may not make a profit in excess of 5 per cent of the capital investment. When these charges are all met, the rate must be reduced to consumers. No such limitation is imposed on other undertakings.

A similar supervision is maintained over private companies, operating under an order or franchise, since franchises for tramway, gas, electric lighting, and water are conferred by Parliament rather than by the cities. When a company application is made, hearings are had at which evidence and protests from the community or the council are heard. If the authority is conferred, however, the city has no further control. The company may then proceed to tear up the streets and lay its mains, pipes, and equipment as it will. The power of the city ends with the hearings on the application. The only substantial qualifications of this principle are in the case of tramways, where local consent is usually required, and in the case of gas where some control exists over meters. The cities have no control, however, over charges. Parliament, or its boards, retains control of the private companies, even after the franchise has been conferred.

As an instance in point, an application was before the last session of Parliament, known as the Bill for The Administrative County of London Electric Power Company. It sought the privilege of supplying electric power to the entire London metropolitan area. The rates which could be charged were fixed in the bill. The maximum charge was 3 cents a kilowatt hour for power and bulk delivery. The stand-



ard price a kilowatt hour was  $1\frac{1}{2}$  cents, and the standard dividend 8 per cent. It was provided, however, that if the average charge upon the books of the company at any time exceeded 2.1 cents, then no dividends at all could be declared. A sliding scale was set out, by which the dividends were to increase as the price was reduced.

The measure aroused great opposition in the London County Council and the metropolitan boroughs, which went to great expense to bring about its defeat. In this they were successful. The cause of their opposition was twofold. In the first place it was felt by the local boroughs owning lighting plants that the private company was designed to put them out of business and destroy their undertakings. The principal opposition, however, was born of the feeling that no such private monopoly should be granted; that if it was conferred at all it should be on the County Council. Further than this, it was felt that in the near future the Council must own such a plant itself, and, as the powers were in effect exclusive, that when it did decide to act it would be called upon to pay an exorbitant franchise value for the property.

It was repeatedly stated in the public press that \$1,000,000 was spent on the bill. Of this, \$250,000 was expended by the promoters and \$750,000 by the public authorities for protection. It was not suggested that any of this fund was used corruptly. It went for attorneys' fees, for expert witnesses, for printing, and the like.

This incident shows the method of promoting both public and private bills and the annual burden on the city in protecting itself from private promoters who are constantly seeking powers or franchises in the cities and towns. For such franchises are sought in Parliament, not from the councils.

In all private electric-lighting undertakings, overcapitalization is also prevented by parliamentary provisions, as are excess charges. For upon complaint being made to the Board of Trade it has power to order a reduction of the rates. The Board may also order a change or improvement of service.

In all gas, water, and tramway undertakings, the companies are required to publish annual statements of earnings, expenditures, rates of charges, the illuminating power of gas, the number of consumers supplied, etc. By this means the public are always apprised of the financial condition and earnings of the companies.

The parliamentary control is absolute and perhaps as efficient as centralized oversight can be. In so far as regulation can be relied upon to secure good service, efficient and honest management, and proper charges, they have been obtained in Great Britain. But the control is all in the central authority. The cities have no authority after a franchise has been granted. To a large extent overcapitalization has been prevented, proper construction has been secured, and



considerate treatment of the community obtained. Any comparison, therefore, of municipal with private operation is a comparison of private operation under the conditions most favorable to the public, for the franchise enterprises in Great Britain are the best possible examples of monopoly under regulation.

Parliament has treated these industries as monopolies. Competition has rarely been invoked as a means of regulation. The essentially exclusive character of the business has always been recognized. In London, it is true, there are several gas and electric-lighting companies, but they do not serve the same areas. In Glasgow the city was permitted to open a competing telephone system. But in almost every other instance Parliament has given exclusive privileges and then held the company to a strict account in its dealings. It is in the face of such regulation and supervision that the movement for municipal ownership has grown to its present proportions. Regulated private monopoly has proved itself preferable to unregulated monopoly, but it has not satisfied the British people.

### METHOD OF LOCAL ADMINISTRATION.

The town council is the supreme legislative and executive authority of the British city. The members are chosen by districts, usually three from a ward, elected in alternate years. National politics are much less prominent in local matters than in America. In London, and to an increasing extent in the other English cities, the line of cleavage is between the Moderates and the Progressives, between those who oppose any extension of the activities of the city and those who favor the use of the widest powers of the Government for the welfare of the people. In some cities, however, national issues and national party names figure rather prominently. Glasgow is an apparent exception. In that city national politics exercise but scant influence.

The council is a large body. The London County Council consists of 118 members elected by parliamentary districts, as well as 19 aldermen chosen by the Council. The Glasgow council has a membership of 77, that of Liverpool 134, while the lesser communities have proportionately smaller bodies. The members of the council are elected for three years, and they in turn elect a limited number of aldermen who serve for a longer period. Aldermen are often selected from the outgoing members of the council. The mayor is also chosen by the council from its membership. His powers are largely social and representative, but the post is exceedingly dignified. It is a reward for long service and distinguished ability. The town clerk also enjoys large powers. He is the city solicitor, is highly paid, and is an expert official. The members of the council serve without compensation.



The council is divided into large committees. These committees exercise all of the executive powers reposed in the American mayor and heads of the departments. Through the committees, subject to confirmation by the council, the managers, engineer, and higher administrative officials are chosen. Subordinate employees are appointed by the manager, who is held responsible for the administration of the undertaking.

The merit system prevails in all city employment. It is not enforced by law, but by custom and public opinion. Tenure of office is for good behavior and efficient service. Neither is there a spoils system. Inasmuch as there are no parties to maintain or machines to fortify, there is no reason for the misuse of patronage. This probably explains its absence.

To a considerable extent managers are chosen because of their administrative rather than their engineering skill. The former manager of the Glasgow tramways, John Young, was head of the street-cleaning department before he became tramway superintendent. The present manager, James Dalrymple, was an accountant.

Mr. C. R. Bellamy, of Liverpool, was an inspector of lighting; J. M. McElroy, of Manchester, was a clerk in the city's employ. These men were transferred to the street-railway systems because of their business ability. Competent engineers are employed by the managers.

The annual reports of these enterprises are very elaborate. They give the administration of the undertakings in detail and are annually presented to the council in printed form. They are widely quoted by the press and carefully studied by the public, who show an intimate acquaintance with the transactions of the council. In many cities, possibly in most of them, membership in the council is highly prized and eagerly sought after. It involves an immense amount of labor, but a corresponding appreciation from the community.

The uniform efficiency, integrity, and high purpose of British officials seem to be traceable to the following causes:

1. The traditional distinction that attaches to the public service in Great Britain.

2. The magnitude of public work and the importance of municipal enterprise. This makes the town council an attractive field for the business or professional man of ability and the character of the council a matter of interest to all classes. The taxpayer and the voter feel that their interests must be properly cared for.

3. The absence, or at least the subordination, of partisan spirit in local matters and the elevation of the city's welfare over all other issues.

4. The method of nominating candidates by petition rather than by party machinery, the election of councilmen at a separate elec-



tion when no other issues are before the people, and the limitation of the candidates before the people to the two or more nominees from the ward; for the British elector (aside from the poor board) has but two officials to vote for—a candidate for Parliament and a candidate for the town council. The issue before him is always clear and distinct. It is never confused by false or foreign matter. It is the city at one time, the nation at another. To this should be added the fact that there is no organized class that wants anything from the city but good government. There are no franchises to grant, no privileges to give away. In addition, many cities do most of their work by direct labor rather than by contract. They pave the streets, build sewers, construct tram cars, even build engine houses and model dwellings by direct employment under the city engineer. There is thus no class whose interest desires the election of either partisan or venal officials. There is no interest that can be organized and no class whose pocket is at war with its civic obligations.

This interest is still further promoted by the fact that every voter is a taxpayer. This, or the possession of real property, is the qualification of the suffrage. Even a lodger can vote, if he pays a certain sum each week, but the predominant element in the English electorate is the taxpaying class. This is almost equivalent to universal suffrage. But the rates or taxes, instead of being imposed on property as such, are imposed on the rental paid. It is a sort of local income tax. The tax is paid largely by the tenant. As a means of stimulating interest in local matters, it is eminently successful. It is this pecuniary interest in every act of the council; it is the hope of gain or the fear of loss, as much as anything else, that explains the jealous watchfulness of local affairs by the public.

### MUNICIPAL WATER SUPPLY.

As in America, water was the first of the public services to be brought under municipal management. The demands of health, of sanitation, and of fire protection were of such supreme importance that the cities early saw that the water supply could not with propriety be left to private enterprise. This was the more true because as the cities grew in size the supplies of water adjacent to the large towns became inadequate or in danger of pollution. It became necessary to find more distant areas, where larger supplies could be obtained. Thus, in the case of Glasgow, private enterprise took its supply from the river Clyde. But as early as 1855 the city obtained powers to take over the undertaking and go to Lake Katrine, thirty-four miles away in the Highlands, and bring its supply through great aqueducts to the city. Manchester and Liverpool acquired large and distant areas and impounded the water for their supply, as well



as that of adjacent areas. Manchester went to the English lake district, over one hundred miles away, and purchased Lake Thirlmere, while Liverpool went seventy miles away to Wales and erected an immense reservoir. Birmingham has also gone to the mountains of Wales for water supply, while Sheffield, Derby, and other Midland cities have secured large watershed areas in their neighborhoods.

The new London water board, which has recently taken over the eight private water companies of the metropolis, is confronted with the same problem, and the suggestion has been made that it, too, should go to Wales for its supply.

As a consequence of the absence of any near-by water supplies, like the great inland lakes and rivers of America, the capital cost of the water undertakings has been enormous.

Very few of the large cities are now supplied by private companies. There is no annual return to the Government of water undertakings, but according to the Municipal Year Book for 1905 there are in the entire United Kingdom 1,045 public undertakings, with a capital investment of £67,998,457 (\$330,914,491), and but 251 private companies, with a capital investment of £40,655,700 (\$197,850,964).

The same authority gives a statement of earnings and expenditure of local authorities and joint boards for 1900-1901, the net receipts being gross receipts less operating expenses, not including fixed charges. These returns are for the United Kingdom, and are as follows:

Gross receipts .....	\$23, 663, 687
Working expenditure (not including fixed charges) .....	11, 984, 652
Net receipts .....	11, 679, 035

In the majority of instances private companies anticipated the public authorities. When it became necessary or expedient to acquire possession, Parliament almost always extended the power, but as no special limitations were imposed upon the companies, and as their grants or franchises were in perpetuity, the prices paid were far in excess of the physical value of the properties. Thus, in the case of the eight London companies acquired in 1904 by the Metropolitan Water Board, the price paid was £42,287,271 (\$205,791,004), the amount claimed by the companies was £50,939,198 (\$247,895,607), and the probable physical value of the plants was not in excess of \$120,000,000.

The general policy observed in the administration of the water supply has been one of service rather than of profits. The aim has been to supply the maximum quantity of water at the lowest possible cost. This policy has led some cities to abandon all direct charges for water to the consumer, and maintain the department wholly out of taxes. In others a mixed policy of taxes and private charges



has been adopted. Thus in Glasgow a tax of a penny on the pound (0.42 per cent) of rental values is levied, and in Liverpool the tax is sixpence on the pound (2.5 per cent). The revenue from taxes is then supplemented by meter charges to large consumers and domestic rates to the smaller ones. Inasmuch as the method of assessing charges for water is so confused, and is so different in the different localities, it is impossible to work out any statement or comparison of the rates, as in the case of gas, electricity, or tramway enterprises. It has not been the policy to operate the water plants for a profit, although out of 360 undertakings from which returns are available about 70 aided the revenues in 1904 in sums ranging from £25 (\$122) to £15,368 (\$74,788). But the general policy has been to make use of any earnings in reducing the charges, paying off the indebtedness, or extending the system.

At the present time there is no dissent and no organized resistance to the municipalization of water supply. Parliament recognizes the essential necessity of public operation. Then, too, in many towns the private companies were unable to meet the growing necessities of the situation, and could not provide the capital, with any hope of return, for such enterprises as those of Manchester, Liverpool, Birmingham, or Glasgow.

Any city desiring to take over the supply can usually obtain the necessary powers, either to purchase by agreement or to do so by compulsory arbitration. In either case the price paid is based upon the capitalization of earnings and is likely to be very heavy.

### MUNICIPAL GAS SUPPLY.

The municipalization of the gas service has been less rapid than that of the tramways or water, owing to the nature of the private franchises, and the desire to acquire first the electricity supply. Speaking relatively, electric lighting was in an undeveloped state up to very recent years. The cities have therefore anticipated the intrusion of private enterprises, and the necessity of later acquiring these undertakings from private companies at an excessive price, and have acquired electricity in preference to gas undertakings.

Notwithstanding this fact, the number of public gas enterprises continues to increase. In 1882 the total capital outlay by public authorities for 148 gas undertakings in the United Kingdom (not deducting the amount repaid) was £17,326,183 (\$84,317,870). In 1904 the capital outlay had grown to £37,103,279 (\$180,563,107), an increase of 114 per cent.<sup>(a)</sup> Of the 260 enterprises under public con-

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<sup>a</sup> According to the Municipal Journal for March 3, 1905, "at the end of 1878 the amount of outstanding debt (after deducting the amount repaid) represented by gas works in England and Wales was £9,427,346 [\$45,878,179]; it is now £23,110,919 [\$112,469,287]," or an increase of 145 per cent.



trol at the latter date only 6 showed a deficit after deducting the amount paid for operating expenses, interest, annuities, repayment of loan, redemption of annuities, and sinking fund, and the average deficit was but £1,503 (\$7,314).

According to the Board of Trade returns there were 260 local authorities supplying gas in 1904, as against 459 private company undertakings. This does not include all of the gas plants in Great Britain, of which there are, approximately, 1,598. Many of these, however, supply a very limited area, or are purely private in character.

The following table from the Annual Return to the Board of Trade, as analyzed in the Municipal Journal of March 3, 1905, indicates the standing of the public enterprises for the year ending March 25, 1904, and of the private companies, in so far as returns are given, for the year ending December 31, 1903. A considerable number of companies make no return.

STATISTICS OF PUBLIC AND PRIVATE GAS UNDERTAKINGS IN THE UNITED KINGDOM.

Items.	Public enterprises (year ending March 25, 1904).	Private companies (year ending December 31, 1903).
Number of undertakings .....	260	459
Capital outlay (not deducting amount repaid) .....	\$180,563,107	\$393,549,860
Gross receipts .....	\$47,787,497	\$86,412,620
Operating expenses .....	\$34,951,242	\$64,307,498
Per cent of operating expenses of gross receipts .....	73.14	74.42
Net receipts (gross receipts less operating expenses) .....	\$12,836,255	\$22,105,122
Per cent of net receipts of capital outlay .....	7.11	5.62
Gas sold, in 1,000 cubic feet .....	57,754,404	93,923,290
Length of mains, in miles .....	11,952	18,074
Number of consumers .....	2,045,777	2,385,348
Number of public lamps lighted .....	301,308	335,363
Approximate average charge per 1,000 cubic feet .....	\$0.65	\$0.71

From this table it appears that in 1904 the number of public enterprises constituted 36.2 per cent of the total number of public and private enterprises making report to the Board of Trade, and that the capital outlay of the public enterprises was 31.5 per cent of the total capital. The number of consumers for the public companies, however, was nearly equal to that for the private plants. Were it not for the large private gas companies in London, the number of consumers for the public undertakings would greatly exceed that for the private companies. On the other hand, it should be said in connection with these figures that but few of the large cities outside of London get their gas from private companies.

Despite the fact that the average price of gas from the municipal plants is 6 cents less than the price charged by the private plants, the per cent of net receipts of capital outlay is considerably higher. At the same time, a number of cities make no charge for lighting the



city, while it is quite universal for them to pay higher wages and allow shorter hours to the employees.

It appears from these returns that instead of public authorities being less efficient than private enterprises, they are in fact more efficient. From the above table it appears that the net receipts of the local authorities amounted to 7.11 per cent of the capital outlay, as against 5.62 per cent for the private companies; while the operating costs of the municipalities was but 73.14 per cent of the gross receipts, as against 74.42 per cent by private capital.

While the average price of gas to the consumer is 2s. 8d. (65 cents) from the public undertakings, and 2s. 11¼d. (71 cents) from the private companies, there are many instances of lower prices in both classes. The following are some instances of lower prices charged private consumers by public companies, with the candlepower of the gas supplied. The figures are from the returns of local authorities to the Board of Trade for the year ending March 25, 1904:

PRICE PER 1,000 CUBIC FEET CHARGED PRIVATE CONSUMERS, AND CANDLE-POWER OF GAS IN CERTAIN CITIES, 1903-4.

City.	Popula- tion (1901).	Price per 1,000 cubic feet.	Candle- power of gas.	City.	Popula- tion (1901).	Price per 1,000 cubic feet.	Candle- power of gas.
Belfast.....	348,965	<sup>a</sup> \$0.55	17.46	Glasgow.....	735,906	\$0.57	21.00
Birmingham.....	522,204	.42-.58	16.28	Lancaster.....	40,329	.55	19.00
Blackpool.....	47,346	.57	19.00	Leeds.....	428,968	.52	18.38
Bradford.....	279,767	<sup>b</sup> .55	17.25	Lincoln.....	48,784	.44	16.88
Bury.....	58,029	.53	19.02	Nottingham.....	239,743	.53-.65	16.50
Carlisle.....	45,478	.55	20.00	Widnes.....	28,580	.28-.32	18.16
Darlington.....	44,496	.49	16.50				

<sup>a</sup> Less discount of 2½ to 20 per cent, according to consumption.

<sup>b</sup> Less discount of 5 to 12½ per cent, according to consumption.

The above rates are for consumers inside the boroughs; a higher rate is usually charged outside. For some of the cities a lower rate is specified for consumers using gas for motive power.

According to reports from town clerks, bringing the figures down to March 31, 1905, three of the cities shown in the table were at that time charging still lower rates to private consumers, as follows: Belfast, 2s. 1d. (51 cents); Glasgow, 2s. 1d. (51 cents), and Lancaster, 2s. (49 cents). Here again, as with water-supply undertakings, private companies were first in the field. As it has been the general policy of Parliament to treat all quasi public services as monopolies, and in the case of gas and water to grant unlimited franchises, the cities could only acquire the undertakings either by agreement or occasionally by compulsory purchase through arbitration. By virtue of this fact, the purchase price paid by the cities has usually been greatly in excess of the physical value of the plants, a considerable sum being allowed for franchises or good will.

The general policy of Parliament as regards bills for the compulsory purchase of the gas undertakings by local authorities, ac-



according to a memorandum on the Relation of Local Authorities to Electric Lighting, Gas, and Tramway Undertakings, issued by the Board of Trade in 1899, appears to be:

1. To compel an unauthorized gas company to sell if past mismanagement or bad supply of gas is proved.

2. When such allegations can not be substantiated, to refuse to give the local authority compulsory power to purchase, but in certain cases, where very strong local feeling exists, committees have brought some pressure upon the company to induce them to agree to sell upon very favorable terms.

3. In the case of an authorized gas undertaking to refuse compulsory purchase.

4. In no case to allow a local authority to compete with an existing gas undertaking.

This attitude doubtless explains in large measure the relatively slow acquisition of the gas supply. Parliament has not recognized the essential necessity of public operation as in the water supply, and has given greater security to private promoters in the form of perpetual grants than in the case of electricity and tramway undertakings. Moreover, the supervision of the gas undertakings is always more severe than that of other enterprises.

The amount which the companies can claim when they do sell is, however, limited by virtue of the control which Parliament exercises over their capital. In the first place, the prices which may be charged for gas are generally fixed by the act creating the corporation and giving it a license. The gas must be up to an established standard of illuminating power, while the local authorities have power to test meters and examine the gas.

Ability to water the stock is somewhat limited by two provisions. Under an act of 1847 the annual profits of the companies may not exceed 10 per cent of the actual capital invested. Subsequently the maximum profit was reduced to 7 per cent on all additional ordinary capital and to 6 per cent on preferred stock. The companies are required to dispose of all issues of stock by auction rather than by private sale to members, and if the stock so sold realizes a premium, the premium can not be divided among the stockholders.

Further, provision is made by law for a sliding scale of prices to be charged. What are termed "standard" dividends and prices are first fixed. For every charge of 1 penny (2 cents) over the standard price of gas the annual dividends of the company are cut down one-fourth of 1 per cent, and for every reduction in price of 1 penny (2 cents) per thousand cubic feet the company's dividend may be increased one-fourth of 1 per cent. By the operation of this automatic provision it is to the advantage of the company to reduce the price to the public. Evidences of the operation of the act will be found in reference to the Sheffield Gas Company, a private corporation, which sells gas for 1s. 6d. (36½ cents) a thousand cubic feet.



By virtue of this regulation, as well as the annual reports of the company to the Board of Trade, the evils of stock watering are reduced, the community is protected from impure gas or excessive charges, while in cases of purchase by the community the value of the plant is more readily ascertained.

It is the policy of most towns to supply gas at as low a price as possible. Light is looked upon as a prime necessity, and its widest use for domestic purposes a thing to be stimulated. This is achieved in a variety of ways. Public as well as private authorities aid in the sale of gas stoves and fixtures. Many cities provide meters with a penny-in-the-slot contrivance, by which the very poor are able to secure a supply of from 25 to 35 feet, consistent with their purse. Manchester offers gas stoves rent free and sets prepayment meters. Birmingham has a similar liberal policy. Sheffield is one of the five large towns still supplied by a private company, and it is so administered in the interests of the community as to be secure in its position. The domestic rate in Glasgow is 2s. 1d. (51 cents) a thousand cubic feet, while an industrial rate of 1s. 9d. (43 cents) is offered. This latter price is somewhat below the cost of manufacture, distribution, and capital charge, but is in excess of the working cost.

The rates charged by the cities show the widest divergence. It can only be explained by difference in policy or efficiency in management. They range all the way from an average of 1s. 3d. (30 cents), in the little town of Widnes, to even as high as 7s. 6d. (\$1.83) in small rural communities with very few consumers; for a number of public plants have been constructed by semiurban communities of three or four thousand people. The seven London companies charge rates ranging from 2s. 3d. (55 cents) to 3s. 8d. (89 cents), as shown in the following table:

PRICE PER 1,000 CUBIC FEET OF GAS CHARGED PRIVATE CONSUMERS BY LONDON GAS COMPANIES AND CANDLEPOWER OF GAS, 1903.

Name of company.	Price of gas per 1,000 cubic feet.	Candle- power of gas.
Brentford .....	\$0.71	15.8
Commercial .....	<sup>a</sup> .61	14.9
Crystal Palace District .....	.63	15.9
Gas Light and Coke .....	<sup>b</sup> .73 <sup>c</sup> .59	16.53
Mitcham and Wimbledon District .....	.89	15.72
South Metropolitan .....	<sup>d</sup> .55	14.7
Wandsworth and Putney .....	.57	15.1

<sup>a</sup> Less discount of 3 to 20 per cent.  
<sup>b</sup> Price north of the Thames.

<sup>c</sup> Price south of the Thames.  
<sup>d</sup> Less discount of 2½ to 5 per cent.

FINANCIAL SHOWING.

In so far as gas undertakings are concerned, they have not been a burden on the taxpayers. Up to the year ending March 25, 1904, according to the Board of Trade returns, the 260 public companies



had repaid out of earnings the sum of £9,426,484 (\$45,873,984) in the reduction of their indebtedness. For the same year the net receipts (that is, gross receipts less operating cost) were £2,637,677 (\$12,836,255), and after paying interest charges, depreciation, and a sinking fund charge of approximately three per cent, 212 of the 260 undertakings reported a surplus amounting to £967,194 (\$4,706,850) to be used for the relief of taxation or otherwise.

How extensive the relief of taxation has been is indicated by the following table for selected cities, showing the contributions from the gas undertakings for the year 1904-5. These contributions out of profits of operation are in addition to regular taxes which are paid by municipal plants just as by private companies:

CONTRIBUTIONS TO THE RELIEF OF TAXATION FROM THE GAS UNDERTAKINGS OF SELECTED CITIES, 1904-5.

[From reports furnished by town clerks. Figures showing price of gas do not in all cases agree with those given on page 36. Figures here are for the year 1904-5; figures on page 36 are for the year 1903-4.]

City.	Popula- tion, 1901.	Year opened as mu- nicipal plant.	Price of gas per 1,000 feet to pri- vate con- sumers.	Contri- bution to relief of taxation, 1904-5.
Barrow.....	57,586	1867	\$0.61	\$28,571
Belfast.....	348,965	1874	.51	123,818
Birmingham.....	522,204	1875	.42-.58	265,351
Bolton.....	168,215	1872	.61-.73	107,394
Bradford.....	279,767	1871	.44-.51	12,166
Carlisle.....	45,478	1850	.55	37,049
Coventry.....	69,978	1884	.51-.61	9,733
Darlington.....	44,496	1854	.49	41,365
Dewsbury.....	28,050	1873	.71	26,162
Halifax.....	104,936	1855	a .55	44,903
Lancaster.....	40,329	1879	.49	12,166
Leeds.....	428,968	1870	.52	78,448
Leicester.....	211,579	1878	.57	228,764
Longton.....	35,825	1878	.79	9,733
Manchester.....	543,872	1843	.57	291,990
Nottingham.....	239,743	1874	.53-.61	13,140
Warrington.....	64,242	1878	.61-.73	50,271

a Less discount of 8½ to 17½ per cent, according to consumption.

The foregoing is not a complete list of the municipalities whose gas plants made contributions out of earnings to the relief of taxation. Among other important ones may be mentioned Blackpool, Burton-on-Trent, Oldham, Rochdale, Salford, Southport, Stockport, and Wigan. Many of these are very old plants, some of them having been operated by the city for more than fifty years, and all of them for at least a generation.

The following is a comparative statement of six gas undertakings operating in the larger cities of Great Britain, showing the results of public and private operation. The statistics of the municipal plants were obtained from official reports, and are for the year ending March 31, 1905; those of the private companies are from the latest returns of the Board of Trade, and are for the year ending December 31, 1903.

## COMPARATIVE STATISTICS OF THREE MUNICIPAL AND THREE PRIVATE GAS UNDERTAKINGS.

City.	Popula- tion, 1901.	Date when plant was ac- quired.	Capital ex- pended, less deprecia- tion.	Earnings applied to reduction of capital or in sink- ing fund.	Present indebted- ness.
Municipal plants:					
Glasgow .....	735,906	1869	\$11,627,582	\$2,664,394	\$9,340,200
Manchester .....	543,872	1843	12,196,111	<sup>a</sup> 5,991,752	6,062,764
Birmingham .....	522,204	1875	12,491,838	<sup>b</sup> 3,686,018	10,912,581
Private plants:					
Sheffield .....	380,793	1855	4,565,692	-----	-----
Liverpool .....	684,958	1848	9,669,609	-----	-----
Newcastle-upon-Tyne .....	215,328	1864	12,243,666	-----	-----

City.	Results of operation for the fiscal year.								Payment from earnings to gen- eral mu- nicipal revenue.
	Gross receipts.	Operat- ing ex- penses.	Net re- ceipts (gross receipts less oper- ating ex- penses).	Amount added to sink- ing fund.	Inter- est pay- ments.	Price of gas per 1,000 cu- bic feet.	Candle power of gas.	Percent of con- sumers of total popula- tion of terri- tory served.	
Municipal plants:									
Glasgow .....	\$3,894,061	\$3,175,907	\$718,154	\$218,540	\$446,224	\$0.51	20.00	20.78	-----
Manchester .....	3,365,209	2,618,975	746,234	213,221	211,493	.57	17.04	20.00	<sup>c</sup> \$291,990
Birmingham .....	4,269,093	3,427,972	841,121	182,902	407,467	.42-.58	16.36	13.00	265,351
Private plants:									
Sheffield .....	1,868,629	1,319,449	549,180	-----	-----	.36-.45	17.37	<sup>d</sup> 18.82	-----
Liverpool .....	2,984,853	2,403,292	581,561	-----	-----	.58	20.05	<sup>d</sup> 14.22	-----
Newcastle-upon-Tyne .....	1,839,892	1,294,328	545,564	-----	-----	.46-.77	16.22	( <sup>e</sup> )	-----

<sup>a</sup> Also \$718,334 in reserve fund and \$473,617 used in extension of plant out of earnings, making a total of \$7,183,703 excess of assets over debts, the earnings of the plant.

<sup>b</sup> Also a reserve fund of \$486,650.

<sup>c</sup> The total payments of the Manchester gas undertaking since its opening amount to \$13,087,488, or an average of \$211,089 yearly.

<sup>d</sup> Based on census of 1901.

<sup>e</sup> Not reported.

The net financial results to the city from the two policies of municipal and private ownership appear in the columns headed "Earnings applied to reduction of capital or in sinking fund," "Amount added to sinking fund" during the year, "Price of gas per 1,000 cubic feet," and "Payment from earnings to general municipal revenue" during the year. It is claimed that the social results have been as potent an advantage of public operation as the financial results.

From this comparison it appears that the three public companies have repaid on their capital indebtedness out of earnings the sum of £2,536,148 (\$12,342,164). The private companies have made no such payment. The same is true of the sinking fund repayments, which for the year amounted to £126,305 (\$614,663), as well as the contribution to the relief of taxation, amounting to £114,526 (\$557,341). The candlepower is about the same in both, as is also the per cent of consumers of the population.

The favorable financial showing is not the most conspicuous advantage claimed for public operation. While the prices charged by public plants are lower, averaging about 10 per cent less for the



entire United Kingdom, and while substantial aid is given in relief of taxation, it is the ability of the council to serve the people, to light the homes and dark alley-ways, and to substitute gas for coal among all classes that marks the greatest gain to the community. By reference to the table on page 35 it appears that the 260 public plants supply 2,045,777 consumers, as opposed to only 2,385,348 supplied by the 459 private ones. The cities, as well as the private companies, examine premises, install fixtures, and rent or sell fittings. In some instances they maintain and keep the fittings in order. In some towns nearly the entire population is supplied with gas for illumination, the repayment meter enabling the city to extend its use to the very poor. An examination of the returns under the several cities will indicate the extent to which gas stoves have been introduced. The effect of popularizing the use of gas can not be measured in a financial way. It means greater cleanliness, greater comfort, and an improvement in morals and happiness that can not be shown in the balance sheet of earnings. A similar policy is adopted of reducing the price of gas to manufacturing industries and to large consumers. Special rates or discounts are offered, the price being fixed at a point in excess of actual working or operation cost, but below the price charged the domestic user. The purpose is to serve the industry of the town, to promote cleanliness, and to reduce the smoke evil.

The municipalization of electricity has stimulated a healthy rivalry between the gas and electricity undertakings. The committees of the town council as well as the managers intrusted with the enterprises, always eager for an improved balance sheet or a reduction in price to the user, vie with one another in the adoption of devices to promote use and increase consumption.

The general policy of administration of the public undertakings is not so much to make profit as to increase service. Prices are constantly being lowered, and while the immediate effect is often a diminution in profits it is soon regained by the increased consumption. The effect of these experiments by the public plants is to compel the private companies to follow suit, for public opinion and the fear of purchase impels the companies in self-protection to satisfy the public demand.

While the effect of municipalization on labor is not so apparent in the gas industry as in the tramways, the general result has been an improvement in conditions. Wages have been increased to some extent and hours of labor shortened. Other advantages, such as security of position, superannuation funds, and holidays have followed. The cities are able to secure a better class of employees, for the public service seems to command some dignity and to stimulate the self-respect of the employee.



## MUNICIPAL TRAMWAYS.

The evolution of municipal tramway undertakings is a history of local demands and parliamentary acquiescence. The Tramways Act of 1870 is the basis of municipal as well as private operation, and has remained with practically no amendment the general act down to the present time. This act was intended to facilitate public construction but private operation. It fixed the method of authorizing provisional orders through the Board of Trade, which are confirmed by act of Parliament. Procedure by private bill is also open to local authorities or private parties, and powers have been obtained frequently in this way. The restrictions placed upon private companies, and especially the limitation of the franchise to twenty-one years, deterred private capital in the past from undertaking new enterprises or, as these franchises were about to expire, from adopting improved methods when already in the field.

The act was designed to enable local authorities to lay the tracks in the streets, and subsequently lease them to private companies for operation. The city was to provide the structural equipment and the company the cars and working capital. At the end of twenty-one years the local authorities were authorized to acquire the enterprises on what is known as "structural value terms."

A number of the special acts obtained by the cities, specifically authorized them to purchase the tramways at the end of a term of years and under these acts the enterprises have been acquired. Subsequent to 1890 many of the leases under the general act of 1870 also expired, and the cities thereupon sought the sanction of Parliament for the assumption of the working of the tramways. According to a report of the Board of Trade issued in 1899<sup>(a)</sup> "a powerful impetus was given to this movement by the adoption in recent years of an inexpensive form of electric traction for tramways. Many local authorities possessed installations for electric lighting, and owing to tramways being mainly a 'day load' and lighting a 'night load' on the electrical generators, the economical advantage of working both together became very considerable." The same report says further:

On the general question it may be added that the annual returns of tramway traffic, published by the Board of Trade, show that the working of tramways by local authorities has been a success, so far as it has gone. Huddersfield tramways, which no company would work, have been worked to such advantage by the local authorities that they are anxious to extend their tramways into a number of outlying districts. Plymouth, which was a failure under a company, has been a municipal success, and the lines are being extended.

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<sup>a</sup> Report of the Parliamentary Committee on Municipal Trading, 1900. Appendix A.



Places like Halifax and Dover, in which no company had provided tramways during more than twenty years after the passing of the general act, have been profitably worked by the corporations [cities].

It is not supposed that these favorable results were entirely due to municipal, as against company working. No small part of the success achieved by the municipalities is due to the fact that their taking up the working has synchronized with the introduction of a cheap and attractive method of electric traction.

Subsequent years have more than confirmed this statement. For twenty years after the passage of the act of 1870 the cities confined themselves to building the tracks and leasing them to a private company. In only one instance did a city operate its tramway prior to 1894. Municipal operation along with ownership is a matter of the last decade. Within that time nearly every large city in the United Kingdom has taken over its tramways. The leading exceptions are Edinburgh, Dublin, Coventry, Carlisle, and Cork, where the lines are still operated by private companies. Within the last two years London, Birmingham, and Belfast have followed the lead of other cities in the matter of operation.

Actual working began with Huddersfield in 1883, but the very successful experiment of Glasgow, beginning in 1894, gave a great stimulus to the movement and demonstrated the possibility of successful municipal operation.

By a fortunate coincidence these leases, which were worked as horse-car lines, expired at a time when America and Germany had demonstrated the success of electric traction. As a consequence the cities took over the horse-car lines of the companies and then electrically equipped them. In many instances this involved a heavy cost to the cities, for most of the horse-car equipment, as well as the rails themselves, had to be thrown away. The cities, therefore, entered on their workings burdened with the double capital cost for both horse and electric equipment.

By the terms of the Tramways Act of 1870, and later amendments, the municipality was authorized to take over the enterprise, at the end of twenty-one years, on the physical or "then" value of the plant. The tramway companies contested the method of valuation adopted and claimed something for the franchise. In a case which went up from London (*The London County Council v. The London Street Tramway Company*) the court decided that, as the term for which the franchise was granted had expired, the price to be paid was the physical or replacement value, no payment for franchise value being contemplated by the act. The company claimed £604,090 (\$2,939,804) for depots and  $4\frac{1}{2}$  miles of line, but under the decision the arbitrator awarded the company only £101,798 (\$495,400).

The opinion seems to be now prevalent in Great Britain that transit upon the streets is of such importance to the community that it can



be properly managed only by the city. Moreover, in many instances the public ownership of the electricity plant furnishes an additional reason for the municipal operation of tramways, as by working the two enterprises in conjunction greater economies may be effected.

In the Municipal Journal for March 10, 1905, is given a summary of the Board of Trade "Return of Street and Road Tramways and Light Railways" for 1903-4, which is the latest official report on the subject. This summary shows that the local authorities own 151 undertakings in England and Wales, 10 in Scotland, and 1 in Ireland, or a total of 162 for the United Kingdom. The comparative standing of the public and private companies in the United Kingdom, from the above summary and returns, is shown in the following table. The figures for the public companies are for the year ending March 31, 1904, and for the private companies for the year ending December 31, 1903.

STATISTICS OF TRAMWAY UNDERTAKINGS OWNED BY PUBLIC AUTHORITIES AND PRIVATE COMPANIES IN THE UNITED KINGDOM, 1903-4.

	Municipal undertakings.	Private companies.
Undertakings owned.....	162	150
Total capital outlay .....	\$136,556,540	\$89,499,412
Miles of line open.....	<sup>a</sup> 1,148	<sup>b</sup> 692
Total capital outlay per mile of line open.....	<sup>c</sup> \$118,952	<sup>d</sup> \$129,334

<sup>a</sup> Additional trackage of double-tracked lines, 768 miles.

<sup>b</sup> Additional trackage of double-tracked lines, 292 miles.

<sup>c</sup> Capital outlay per mile of track open, \$71,275.

<sup>d</sup> Capital outlay per mile of track open, \$90,955.

It appears from the Board of Trade returns, as summarized in the foregoing table, that the average capital outlay of the municipal lines per mile of single track open was \$19,680 less than that of the private companies. While this represents a comparison between the average capital outlay of a large number of lines in each case (162 municipal and 150 private), it is possible that a considerable portion of the difference may be due to local conditions. Not all of the public undertakings are actually worked, however, by the public authorities, some of the lines being still leased to private companies and operated by them. This explains the fact that while the number of undertakings worked by private companies is less than the number of undertakings so owned, the number of miles of line operated by private companies is in excess of the number of miles of line open of undertakings owned by private companies. The statistics for the undertakings operated by public authorities and by private companies are given in the following table. As in the preceding table, the figures for the public companies are for the year ending March 31, 1904, and for the private companies for the year ending December 31, 1903.



## STATISTICS OF TRAMWAY UNDERTAKINGS OPERATED BY PUBLIC AUTHORITIES AND PRIVATE COMPANIES IN THE UNITED KINGDOM, 1903-4.

	Municipal undertakings.	Private companies.
Undertakings worked .....	101	113
Capital outlay of undertakings worked .....	\$117,440,724	\$104,986,367
Miles of line operated .....	<sup>a</sup> 993	<sup>a</sup> 839
Gross receipts .....	\$26,069,680	\$15,805,988
Operating expenses .....	\$16,706,184	\$10,997,701
Per cent of operating expenses of gross receipts .....	64.08	69.58
Net revenue (gross receipts less operating expenses) .....	\$9,363,496	\$4,808,287
Per cent of net revenue of capital outlay .....	7.97	4.58
Car miles run .....	126,289,037	68,612,290
Net revenue per car mile .....	\$0.074	\$0.070
Net revenue per mile of line operated .....	<sup>b</sup> \$9,430	<sup>b</sup> \$5,731
Passengers carried .....	1,194,782,762	604,559,911

<sup>a</sup> Additional trackage of double-tracked lines not reported.

<sup>b</sup> Average per mile of track operated can not be given as miles of double track was not reported.

The foregoing Board of Trade returns afford opportunity for a comparison between the results of operation of 101 municipal undertakings with 993 miles of line, and of 113 undertakings with 839 miles of line operated by private companies. There are 12 more undertakings operated by private companies than by municipalities, and 154 more miles of line are operated by cities than by companies. The gross receipts of the public companies exceed those of the private companies by £2,109,050 (\$10,263,692). The working expenditures are, however, but 64.08 per cent of the gross receipts in the public companies, as compared with 69.58 per cent in the private companies. The net revenue of the public companies, despite the more generous treatment of employees, lower fares, and other considerations tending to reduce the profits of public operation, is greatly in excess of that of the private companies, and the per cent of net revenue of capital invested is 7.97 per cent for public as compared with 4.58 per cent for private companies. The other returns are equally favorable to the cities. The net revenue per car mile is greater, as is the number of passengers carried.

The Board of Trade returns also show the contributions from the earnings of the municipal tramways to the relief of taxation. In 1904 they amounted to £207,087 (\$1,007,789). The principal contributions were as follows:

## CONTRIBUTIONS OF MUNICIPAL TRAMWAYS IN RELIEF OF TAXATION IN LEADING CITIES SHOWING SUCH CONTRIBUTIONS, 1903-4.

City.	Population.	Year opened as municipal undertaking.	Miles of single track open.	Contributions of tramways in relief of taxation.
Leeds .....	450,142	1894	81.56	\$253,058
Manchester .....	625,324	1901	137.91	243,325
Liverpool .....	710,337	1897	103.00	156,122
Glasgow .....	782,500	1894	140.00	<sup>a</sup> 121,663
Nottingham .....	239,753	1901	30.12	63,265
Salford .....	228,983	1901	53.54	58,398
Hull .....	240,702	1899	27.10	55,965

<sup>a</sup> Paid to the "Common Good," a municipal fund available for certain municipal purposes.

The amount charged to depreciation, reserve, and renewals by the public undertakings during the year ending March 31, 1904, was £479,430 (\$2,333,146), and the capital repaid or in sinking fund amounted to £467,748 (\$2,276,296), a total of £947,178 (\$4,609,442) or 3 $\frac{3}{8}$  per cent of the total capital outlay. These depreciation, reserve, renewals, and sinking-fund allowances were in addition to large sums paid for maintenance, and charged under the head of operating expenses, for it is the universal practice of the cities to maintain the system at as near its original value as possible out of working expenses. Taxes also are paid by all municipal tramways just as in the case of private enterprises.

### TRAMWAY CONSTRUCTION.

The construction of the tramway lines is carefully prescribed by Parliament. Neither the city nor a private company can build as they will. The rails must be of a certain established type, usually of the girder-groove pattern, which will not project or be a nuisance in the streets. The overhead work, as well as the cars and equipment, is also subject to certain requirements. Every detail of local construction and many of the details of management can be modified only by an act of Parliament or an order from the Board of Trade. Even the rate of speed is fixed. A city can not carry parcels, extend its lines, alter the speed or form of traction, or change any of the important details at its own initiative. It must first go to the Board of Trade or to Parliament. The requirements in the smaller towns are not so severe as in the cities and the larger towns.

As a result of this supervision, as well as the attitude of the cities themselves, the interests of the public are scrupulously cared for. Every accident must be reported, and any serious complaint results in an inquiry. Accidents are much less frequent than in American cities. For instance, in Liverpool there was in eighteen months but one fatal tramway accident from persons getting under the trucks, and this was due to suicidal attempt or gross carelessness. In the year 1904 there was a total of but six fatal accidents in that city with a population of 710,000. The construction work is of much more permanent sort than that of many American companies. This is due partly to parliamentary supervision, partly to the tendency for substantial construction that characterizes the English people, partly to the fact that the city is limited by no terminable franchise. In the larger cities the tracks are laid on concrete foundations, and the rails offer no obstruction whatever to other traffic. The overhead trolley is nearly universal, although here and there occasional horse-car lines remain, and London has used the underground conduit on a portion of its lines. The stability of the work reduces the noise and jar to a minimum. American, German, and English cars of all patterns have



been tried, but the double-deck covered car has met with most approval and is superseding all others. This type of car seats from 60 to 64 passengers, with standing accommodations for from 4 to 6 more. By a simple contrivance, first introduced in Liverpool, the sides and top of the upper deck can be opened or closed in an instant. The substitution of this type of car has proved much more profitable. It increases the carrying capacity, reduces the number of cars required, and is much more popular with the people. Passengers on the upper deck are permitted to smoke. It has been found that the double-deck type is more readily unloaded than the single-deck car. Comparative experiments have been made in Liverpool and Boston, with the result that the stoppage time for unloading is very much less in Liverpool with double-deck cars than in the latter city with single-deck cars.

### CONSTRUCTION COST.

The capital expenditure for construction and equipment is very high. It is difficult to get at the exact figures, because of the difference in methods of distribution employed. Some cities separate the actual cost for street purposes from that of the power stations and outside work. Moreover, many cities purchase their current from the electricity undertakings, and have no power stations, while many others not only have their own power stations, but also are burdened with the cost of the original horse-car lines, which were taken over. With these qualifications, however, the following returns of the companies, as shown in the *Light Railway and Tramway Journal* for July 14, 1905, indicate the capital expenditure per mile of single track in various cities: In Aberdeen it is £12,931 (\$62,929); in Blackpool, £12,887 (\$62,715); in Bradford, £10,109 (\$49,195); in Farnworth, £5,945 (\$28,931); in Glasgow, £19,173 (\$93,305); in Gloucester, £9,983 (\$48,582); in Leeds, £13,585 (\$66,111); in Liverpool, £18,604 (\$90,536). The London County Council's lines are reported at £27,953 (\$136,033); the Manchester system at £12,075 (\$58,763); the Nottingham system at £18,587 (\$90,453); the Sheffield system at £16,610 (\$80,833), and the Wigan system at £16,270 (\$79,178). The investment per mile shows a remarkable variance. This is largely explained by the reasons suggested above, as well as differences in local conditions. On the whole, the average cost of construction under similar conditions is in excess of the cost in the United States.

A number of cities have established large workshops, where not only equipment and repair work is done, but new cars are built.



**RATES OF FARE AND THE ZONE SYSTEM.**

The system of graded fares, or the zone system, is universal in Great Britain. It is a heritage from the old private companies. The underlying idea is that the passengers should pay for the distance traveled. The routes are divided into stages upon which a fare of 1 or 2 cents is collected. This fare is repeated when the zone limits are crossed. For the total distance carried the fare may run as high as 7 or 8 cents. The system seems to meet with universal favor and there is no tendency to abolish it for a straight 2 or 3 cent fare.

But while the fare for a long ride may be greater than in some American cities, an examination of the table which follows shows that the average fare paid per passenger is much lower. And it is the average fare that indicates the cost of the service to the rider. It should be noted, however, that no transfers are given on British railways, while in the United States transfers are very generally given on city lines.

Taking 46 of the large and small cities in Great Britain, as shown in Appendix B, the average fare paid ranges from 0.64d. (1.30 cents) in East Ham to 1.56d. (3.17 cents) in Blackpool. In Glasgow the average fare paid per passenger, irrespective of distance, is 0.91d. (1.85 cents); in Leeds, 1.10d. (2.23 cents); in Bradford, 1.17d. (2.38 cents); in Manchester the average fare is 1.20d. (2.44 cents); and in Liverpool, 1.11d. (2.25 cents). In Sheffield there are no fares in excess of 1d. (2 cents), but this is because of the arrangement of routes, all of which converge in the center of the town.

According to an analysis of the reports of 49 cities in the Light Railway and Tramway Journal for July 14, 1905, the average fare per mile is 0.42d. (0.85 cents) in Liverpool, 0.45d. (0.91 cents) in Glasgow, 0.62d. (1.26 cents) in Bradford, 0.62d. (1.26 cents) in Leeds, and 0.63d. (1.28 cents) in Manchester.

Because of the arrangement of routes, the distances which may be traveled for a given fare necessarily vary considerably in any city. The following table indicates the minimum, maximum, and average length of the stages which may be traveled for various fares in seven large cities. The table is taken from the Annual Report of the Sheffield Tramways Department for 1905.



MINIMUM, MAXIMUM, AND AVERAGE LENGTH OF THE STAGES WHICH MAY BE TRAVELED FOR EACH SPECIFIED FARE IN SEVEN CITIES OF GREAT BRITAIN.

City.	Miles traveled for ½d. (1 cent).			Miles traveled for 1d. (2 cents.)			Miles traveled for 1½d. (3 cents).		
	Mini- mum.	Maxi- mum.	Aver- age.	Mini- mum.	Maxi- mum.	Aver- age.	Mini- mum.	Maxi- mum.	Aver- age.
Bradford .....				1.25	2.50	1.70			
Glasgow .....	0.33	0.84	0.58	1.6	2.76	2.30	(a)	(a)	3.48
Leeds .....	.396	.813	.545	1.01	2.14	1.57			
Liverpool .....				1.22	3.09	2.23			
Manchester (b) .....	.474	1.154	.716	1.55	2.72	2.10			
Newcastle .....				(a)	(a)	1.5	(a)	(a)	2.0
Sheffield .....	.272	.726	.498	1.279	3.290	2.48			

  

City.	Miles traveled for 2d. (4 cents).			Miles traveled for 2½d. (5 cents).			Miles traveled for 3d. (6 cents).		
	Mini- mum.	Maxi- mum.	Aver- age.	Mini- mum.	Maxi- mum.	Aver- age.	Mini- mum.	Maxi- mum.	Aver- age.
Bradford .....	2.75	5.25	3.50						
Glasgow .....	3.82	5.29	4.64						
Leeds .....	2.51	3.92	3.12						
Liverpool .....	2.97	5.76	4.66						
Manchester (b) .....	2.84	3.75	3.33						
Newcastle .....	(a)	(a)	3.0	(a)	(a)	3.5	(a)	(a)	4.5
Sheffield .....									

<sup>a</sup> Not reported.

<sup>b</sup> No half-penny (1 cent) fares on main routes; only on circular routes on outskirts of city.

According to this table the longest ride possible in Glasgow for a half-penny fare is 0.84 mile, the shortest stage established for that fare is 0.33 mile, and the average of all the half-penny distances is 0.58 mile. The average distance that may be traveled for 1 penny (2 cents) as shown for the seven cities in the above table varies from 1.5 miles in Newcastle to 2.48 miles in Sheffield. According to a summary of the reports of 49 cities given in the Light Railway and Tramway Journal for July 14, 1905, the average distance traveled for 1d. (2 cents) varies from 0.9 mile to 2.52 miles.

In Glasgow the half-penny (1 cent) passengers constitute 29.9 per cent of the total number carried. On the London County Council lines the 1-cent fares are 35.97 per cent of the total, and in Sheffield 19.34 per cent. Managers differ as to the financial advantage of half-penny fares. The difference of opinion is partly due to local conditions and partly due to the greater financial conservatism of some managers.

The rates of fare and the distances which may be traveled are the determining factors of cost to the riding public. Whereas the average fare in the United States is a little under 5 cents,<sup>(a)</sup> in England

<sup>a</sup> The average fare for fare passengers only on the street railway lines in the United States during the year ending June 30, 1902, was 4.94 cents. But 22.2 per cent of all-fare passengers received transfers entitling them to an additional ride upon a connecting car without additional payment. (Report on Street and Electric Railways, 1902, United States Bureau of the Census.)

it is less than half that sum. It does not follow because a long ride is possible for the fixed fare that the public take advantage of it in America any more than abroad. Here, as there, the average distance traveled is much below the possible ride. And while the average ride in America is probably longer than in England, it is also true that the wide dispersion of population in our cities compels a greater use of the means of transit, and the much more extensive mileage caters to such use. Extensive mileage is not alone a burden on operating cost; it often increases gross receipts. In other words, while it is advantageous to a company to have a dense population to serve, it may also be true that a given population, widely scattered, will yield larger gross and net earnings than the same population densely packed together.

The following table, compiled from reports of the latest year furnished by the town clerks of certain cities for this investigation, shows the extent to which the population is served by the trackage built and the amount of traffic handled. Receipts and operating expenses are given, and the per cent of operating expenses of gross receipts.

STATISTICS OF TRAMWAYS OPERATED BY LOCAL AUTHORITIES, 1904-5.

[Data from reports furnished by town clerks. The places covered by this table are only a portion of those operating tramways.]

City.	Population served.	Miles of single track operated.	Miles of single track per 1,000 population.	Passengers carried.	Passengers carried per mile of single track.	Number of rides per inhabitant.
Aberdeen .....	165,000	25.50	0.15	15,530,351	609,033	94
Blackburn .....	188,000	23.75	.13	8,661,720	364,704	46
Bolton .....	171,100	42.00	.25	20,205,196	481,076	118
Bradford .....	324,000	95.26	.29	47,108,000	494,520	145
Cardiff .....	168,000	29.00	.17	24,134,363	832,219	144
Chester .....	39,000	4.75	.12	2,095,518	441,162	54
Dundee .....	163,000	23.24	.14	11,641,525	500,926	71
Glasgow .....	1,000,000	147.50	.15	195,767,519	1,327,237	196
Halifax .....	168,000	48.25	.29	17,679,241	366,409	105
Huddersfield .....	100,000	35.00	.35	12,838,150	366,804	128
Hull .....	248,000	27.20	.11	27,102,921	996,431	109
Ipswich .....	70,000	14.91	.21	5,693,680	381,870	81
Leeds .....	446,400	89.32	.20	64,223,666	719,029	144
Liverpool .....	760,000	103.00	.14	116,642,663	1,132,453	153
Lowestoft .....	30,000	5.00	.17	2,338,958	467,792	78
Manchester .....	750,000	146.00	.19	126,900,875	869,184	169
Nottingham .....	240,000	30.00	.13	27,518,200	917,273	115
Warrington .....	80,000	9.00	.11	4,418,225	490,914	55



STATISTICS OF TRAMWAYS OPERATED BY LOCAL AUTHORITIES, 1904-5—  
Concluded.

City.	Car mile- age.	Passengers carried per car mile.	Gross receipts.	Operating expenses.	Net receipts.	Per cent of oper- ating expenses of gross receipts.
Aberdeen .....	1,379,723	11.3	\$311,802	\$180,328	\$131,474	57.8
Blackburn .....	986,953	8.8	237,850	148,818	89,032	62.6
Bolton .....	2,161,130	9.3	466,045	269,351	196,694	57.8
Bradford .....	5,953,392	7.9	1,119,710	777,943	341,767	69.5
Cardiff .....	2,770,049	8.7	546,065	348,909	197,156	63.9
Chester .....	271,718	7.7	46,245	28,347	17,898	61.3
Dundee .....	933,006	12.5	217,506	134,906	82,600	62.0
Glasgow .....	17,943,595	10.9	3,737,005	1,884,148	1,852,857	50.4
Halifax .....	1,540,707	11.5	362,661	267,521	95,140	73.8
Huddersfield .....	1,666,262	7.7	339,725	164,040	175,685	48.3
Hull .....	2,901,698	9.3	548,221	324,785	223,436	59.2
Ipswich .....	692,310	8.2	113,827	91,826	22,001	80.7
Leeds .....	7,121,038	9.0	1,451,353	786,980	664,373	54.2
Liverpool .....	12,166,419	9.6	2,714,962	1,790,118	924,844	65.9
Lowestoft .....	306,895	7.6	52,213	35,973	16,240	68.9
Manchester .....	14,126,124	9.0	3,075,414	2,003,037	1,072,377	65.1
Nottingham .....	2,549,290	10.8	614,785	362,044	252,741	58.9
Warrington .....	403,363	11.0	82,000	51,599	30,401	62.9

An examination of the foregoing table shows that the number of miles of single track per 1,000 of population served varies in these cities from 0.11 mile in Hull and Warrington to 0.35 mile in Huddersfield. Among American large centers Los Angeles and suburbs had, in 1902, 1.38 miles per 1,000 of population, Boston and suburbs had 0.49 mile, and Philadelphia had 0.40 mile. Americans seem to ride more than people in British cities, for while the greatest number of rides per inhabitant for the year shown among British cities is 196, and in nearly all cities is much less, San Francisco reported 340, New York city 266, and Philadelphia 256.<sup>a</sup>

The greater density of traffic in these British cities is indicated by the number of passengers carried per mile of single track, the fig-

<sup>a</sup> The following table, compiled from the Report on Street and Electric Railways, 1902, United States Bureau of the Census, gives statistics relating to trackage and traffic in ten important urban centers in the United States:

STATISTICS OF TRACKAGE AND TRAFFIC IN SELECTED URBAN CENTERS IN THE UNITED STATES, 1902.

Urban center.	Popula- tion served, 1900.	Miles of track.	Miles of track per 1,000 popu- lation.	Fare pas- sengers car- ried.	Passen- gers car- ried per mile of track.	Num- ber of rides per inhab- itant.	Car mile- age.	Pas- sen- gers per car mile.
Boston, Mass .....	927,994	451.68	0.49	228,179,308	505,179	246	47,524,724	4.8
Chicago, Ill. ....	1,769,951	1,036.24	.59	410,284,094	395,935	232	102,366,407	4.0
Cincinnati, Ohio .....	429,137	263.57	.61	86,208,384	327,080	201	23,940,175	3.6
Cleveland, Ohio .....	405,359	237.04	.58	81,370,202	343,276	201	18,768,515	4.3
New York, N. Y. ....	3,548,096	1,299.10	.37	943,687,316	726,416	266	180,499,539	5.2
Philadelphia, Pa. ....	1,293,697	517.53	.40	331,304,685	640,165	256	61,175,495	5.4
Rochester, N. Y. ....	178,333	95.86	.54	20,171,260	210,424	113	5,196,819	3.9
St. Joseph, Mo. ....	102,979	35.15	.34	8,534,278	242,796	83	2,198,630	3.9
St. Louis, Mo. ....	614,328	396.21	.64	129,596,027	327,089	211	31,014,097	4.2
Washington, D. C. ....	279,940	139.67	.50	63,829,752	457,004	228	15,577,212	4.1



ures being for Glasgow 1,327,237, Liverpool 1,132,453, and Hull 996,431. The greatest density reported for any large urban center in the United States was 726,426 for New York City and suburbs.

Thus, so far as may be indicated by the foregoing figures, after comparison with American systems, the British tramway enterprises, with their relatively short mileage and great density of traffic, are in a position peculiarly favorable to profitable operation.

For any satisfactory comparison of rates of fare and distances in England and America, average distances actually traveled must be considered, as well as the possible distance which may be traveled.

The reduction in fares which followed municipalization has resulted in substantial saving to the passengers. In the report of the Glasgow tramways committee for 1897 the gain to the people from the reduction is estimated at £180,000 (\$875,970) per annum. In an article by Sir Charles Petrie, chairman of the Liverpool tramways committee, published in the *Municipal Journal* for March 3, 1905, it is stated that the annual saving to passengers under municipal as compared with company control in Liverpool is £330,000 (\$1,605,945), while the concession of 1-cent fares by the London County Council means, according to the *Municipal Journal* for February 3, 1905, "a clear gift of £100,000 [\$486,650] a year to the passengers."

In consequence of the reduction of fares and the improvement of the service, the riding habit has been greatly stimulated. School children who formerly walked now ride. The same is true of millions of workingmen, as well as of thousands of men and women whose only outing is taken on the top of a car.

It is a rule of the cities to supply a seat for a fare. Not more than a half dozen persons are permitted to stand. When overcrowding is threatened more cars are put in service. Glasgow, with 147.5 miles of single track, has 683 cars in stock; Liverpool, with 103 miles of single track, has 494 cars, and Sheffield, with 65 miles of single track, has 243 cars. The car service is very frequent in these cities. The traffic, as appears elsewhere, is very heavy, and the population is adequately supplied with service.

There is very general belief that the remarkable financial showing of public operation is largely due to low fares. This, with frequency of car service, stimulates travel at all hours of the day. Just as increased consumption has followed the reduction of charges in gas and electricity undertakings, so the reduction of fares on tramways has always been followed by an increase in traffic. In Manchester the number of passengers increased from 66,849,457 in 1903 to 126,900,875 in 1905. In London the growth was equally phenomenal following municipalization and the introduction of half-penny (1-cent) fares. In 1901-2 the number of passengers carried on the council tramway was 119,880,559, and in 1904-5 the



number had increased to 164,818,560. In Liverpool, under the old company management, 38,409,084 passengers were carried in 1897, and 116,642,663 passengers were carried eight years later on the corporation tramways.

It would be wrong to ascribe this great increase in use to the reduction in fares alone. Other causes contributed. The change from horse traction to electricity and the increase in mileage and in population served, and the resulting improvement in the service were likewise large factors.

The rapid increase in public ownership has made an impression on private enterprises. More recent private tramway undertakings have reflected the municipal standard, especially about London, where some splendid private lines have been opened. The fear of a demand for public ownership has compelled the street-railway companies, as it has the gas and electric lighting companies, to do many things which would have been deemed impossible a few years ago.

#### CONDITION OF LABOR.

One of the most insistent sources of discontent under private management was the bad condition of the employees. Their hours were very long, oftentimes eighty hours a week and sometimes as much as fourteen hours per day. The rate of wages was low. This led to constant friction and was one of the principal causes of municipalization. The cities have uniformly corrected such abuses. Present hours range from fifty-four to sixty per week, with one day off in seven. Wages now range from 5d. to 7d. (10 to 14 cents) an hour for motormen and 4½d. to 7½d. (9 to 15 cents) for conductors, while free uniforms and one week's holiday on pay are nearly universal. In some cities special funds are set aside for sickness and disability and death, while recreation rooms, with games, baths, and cafés, are found in many cities. The highways committee of the London County Council estimates that "the value of the concessions already made to the men in respect of increase in pay or alteration of hours and other matters amounts now to about £37,000 [\$180,061] a year." (<sup>a</sup>) In Liverpool, according to Sir Charles Petrie, "the men have been provided with summer and winter uniforms, and we are paying them in wages upward of £40,000 [\$194,660] per annum more than they would have received under company rates." (<sup>b</sup>) He also mentions for Liverpool a sick benefit fund, recreation rooms, athletic grounds, and a superannuation scheme.

In consequence of the more generous public policy there are no strikes and few complaints. The men have rarely felt any necessity

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<sup>a</sup> See Municipal Journal for February 17, 1905, p. 137.

<sup>b</sup> See Municipal Journal for March 3, 1905, p. 165.



to organize into unions, and a cordial relationship prevails between the employees and the managers. The efficiency of the service is still further increased by the advance in pay offered in some cities for long years of service. The policy of paying premiums to men whose runs have been free from accidents for a limited number of months is also followed. This makes the men very careful and tends to diminish accidents.

The British city has come to adopt the idea in all of its departments and in all of its contracts that it must be the model employer; that its wages must be as high as the best, and in general conform to the trade-union rate. The cities have further cooperated in many ways with the employees in order to make municipal employment attractive. All this makes the employee very careful of his job. He is fearful of losing the advantages of long service and good wages. This increases the courtesy of the men and awakens an esprit de corps that manifests itself in many ways.

#### OPERATING POLICY.

The municipal tramway lines have, as a rule, been operated upon the principle that riding may be stimulated by increasing the comfort and convenience of the people. Apparently this policy pays in increased earnings, and it is the constant study of council committees and managers to render the lines more serviceable to the people. If an innovation does not pay, or an experiment is not popular, it is discontinued. Rates of fare are also subject to alteration in the same way, for the city is moved only by the desire to give the maximum of service. Much of the success which has been made in local transportation has, it is said, come by this sort of experimental trial. It was found that fares could be made so cheap that people could not afford to walk. The increase in the frequency of service contributed to the same effect. The public came to understand that a car was to be had at almost any moment and, in consequence, people ride even for short distances.

The same policy has been followed in the management of the gas and electricity supply. The council experiments with rates and charges, with fittings, stoves, and meters, until it is able to determine the point of maximum earnings and maximum service.

The universal inspection of the public is often pointed to as a stimulus to efficiency. Every rider is a critic, as is every member of the council. The public tramway manager feels a sense of responsibility to the public that is unknown to private enterprise. Every act of his, or of the council, is known to the public. Every policy must pass the gauntlet of criticism. The local and technical press is also very alert. Of no enterprise is this so true as it is of the tramways.



Earnings, costs, fares, and distances are known and are constantly under scrutiny, as is the financial policy.

In addition to this, there is a certain competitive rivalry among managers. The managers have a permanent organization and annual meetings are held by them. Councils do not hesitate to go to another city for a manager. In fact, one-half, at least, of the leading tramway superintendents have been called to their present positions from other towns.

In a general way the policy which has animated the administration of the tramways has been :

1. A desire to make them pay their way, not necessarily to earn a surplus over interest and sinking-fund charges, but at all hazards to pay these charges.

The net receipts for the fiscal year 1904 of 50 out of 51 tramway undertakings of local authorities reported in the *Electrical Times* of August 17, 1905, over and above operating expenses, but not deducting depreciation, sinking fund, and interest payments, were £1,695,296 (\$8,250,158). The total amount set aside for depreciation and sinking fund was £410,107 (\$1,995,786); this was in addition to meeting all interest charges on the indebtedness. In one case only (Lancaster, in its second year of operation) the working expenses exceeded the gross income.

In the case of all but 15 of these undertakings the revenue was sufficient to meet interest, depreciation, and sinking-fund charges, as well as to pay operating expenses, including maintenance and local taxes. These 15 undertakings were mostly in smaller communities, and 10 of them were in the first or second year of operation. The total deficit of the 15 enterprises was but £40,454 (\$196,869).

The earnings of many lines, in the face of great reduction in fares, substantial increases in the length of zones, and material improvement in the conditions of labor, seem very large. The net revenue (total receipts less working expenditure) of the city of Glasgow tramways in the year ending May 31, 1905, from fares which averaged but 0.93d. (1.89 cents) per passenger, amounted to 13.78 per cent of the capital expenditure, or 21.35 per cent of the present debt. Manchester had a net revenue of 13.88 per cent of its capital expenditure; Liverpool, 9.86 per cent; Leeds, 11.98 per cent, and Bradford, 7.97 per cent. These, it is true, are the larger towns, but in many of the smaller towns the financial results of municipal operation have been entirely satisfactory.

2. A second motive for the municipalization of the tramways was the demand for improved service. When the trams were taken over, they were operated by private companies as horse-car lines. This should be borne in mind in any comparison as to distances, fares, and service with former conditions. The cities have increased the length



of the ride for a given fare, and have greatly increased the frequency of service. The cars are kept clean, freshly painted, and in some cities free from advertising. Fares have been greatly reduced. In Glasgow the reduction under municipal management amounted to 33 per cent. In Liverpool after 1897, when the tramways came under municipal management, the average penny stage was increased from 1,232 to 4,191 yards. The minimum fare from the center of the city to the suburbs under company management was 6d. (12 cents), while under municipal control the maximum fare is 2d. (4 cents). The average fare per passenger was 1.19d. (2.42 cents) in 1905 as compared with 2d. (4.06 cents) in 1897. In Manchester the reduction amounted under certain conditions to 50 per cent. In Bradford, a universal 2-cent fare prevails before 8 a. m., when the average distance carried is 4.16 miles. In Sheffield all school children are carried at reduced fares, while philanthropic agencies and public functions make use of the system on occasion free of charge.

The motive of administration seems to be to make the tramway system an essential part of the life of the city; to fit it in with the city's needs, development, and growth. Lines are built out into the suburbs for the purpose of increasing the building area and thus relieving the population. The results of this policy, however, are not very apparent, because of the immediate increase in the value of suburban land, coincident with the coming of the cars. The workingmen, for whom homes are desired, find the land held at a much higher price because of the very act of the city which was aimed at their betterment. In consequence of this there has grown up in Great Britain a determined municipal movement for the taxation of land values, in order that the city may retake to itself the pecuniary returns of its own progressiveness.

The movement started in Glasgow, where the efforts of the council to improve housing conditions were largely thwarted by the increased value of suburban lands growing out of the extension of the tramway system. The lines were built into surrounding suburbs and undeveloped areas for the purpose of extending building opportunities. In some instances this involved a loss to the tramways from the reduction in fares or increase in hauls. Immediately suburban land leaped up in value to such an extent as to become prohibitive for the poorer classes. The council saw its own programme defeated by the great value which the city had given to the land which it desired to use.

Partly as a consequence of this experience the council organized a committee for propaganda work. It called a conference of British cities on the taxation of land values. Over a hundred responded, for all English cities had had substantially the same experience. A bill was introduced into Parliament as a result of this movement, while considerable agitation has been made for the purchase by munici-



palities of suburban areas in order that the increase in value which now goes to the private owner may be retained by the community itself.

3. A third and very powerful motive for municipalization has been the desire to improve the condition of the employees, to elevate them above the competitive struggle for a bare existence, and to convert them into efficient civil servants. The extent to which this has been achieved appears elsewhere.

### CONCLUSION.

In the discussion or the criticism of British tramway undertakings British conditions must be understood. A tramway enterprise is controlled to a considerable extent by the physical conditions of the city. Gradients affect operating cost. Density of population and its dispersion are equally important. The mileage of the system taken in connection with the population served is another important matter.

When comparison is made between British and American conditions, all this must be borne in mind. It is also necessary to remember that British standards of construction and service differ from our own. Construction cost is much heavier and the capital outlay is greater. For this reason, interest and sinking-fund charges are large, but maintenance cost low.

The mileage in British cities is not nearly so great as in American cities of equal population. Urban, and especially suburban, railway building has not proceeded with anything like the same rapidity as in the United States. Thus in Glasgow and suburbs, where the system is most thoroughly developed, there are  $147\frac{1}{2}$  miles of single track, serving a population of 1,000,000, or 0.15 mile of track per 1,000 of population; while in the United States in urban centers with over 500,000 population there was 0.49 mile of tracks to the 1,000 of population in 1902.<sup>a</sup> The number of passengers during the year per mile of single track was 1,327,000 in Glasgow, while in the American urban centers just referred to the average was but 491,000 (counting fare passengers only). According to the same report New York City had 0.37 mile of single track per 1,000 of population, Philadelphia 0.40, and Boston 0.49, and the number of fare passengers carried during the year per mile of single track was 726,416 in New York, 640,165 in Philadelphia, and 505,179 in Boston. In all these cases the figures are not for the city only, but for the "urban center" served by the city system of street-railway lines. The average ride on British lines is shorter than in the United States. These elements must be taken into consideration in any comparison of conditions, but they do not furnish the basis for final conclusions.

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<sup>a</sup> Report on Street and Electric Railways, 1902, United States Bureau of the Census.



Other items to be considered in a comparison of British and American lines are those of depreciation and reserve. In Great Britain practice differs widely in the treatment of these items. The allowances for reserve and depreciation and for maintenance for the year ending May 31, 1905, were £246,591 (\$1,200,035) in Glasgow; in Manchester for the year ending March 31, 1905, they amounted to £70,907 (\$345,069); in Sheffield in the year ending March 25, 1905, to £17,387 (\$84,614), and in Liverpool for the year ending December 31, 1904, to £54,218 (\$263,852). These are in addition to sinking-fund appropriations on the capital investment, which are required by Parliament. The general rule has been laid down that the cities must provide for the retirement of the tramway debt in about thirty years' time, so that if the parliamentary rule is adhered to the town will own its undertaking free from any debt within the generation which constructs it. Some cities have done far better than this, notably Liverpool and Glasgow. On the other hand, a number of cities have suffered a deficit. They have not been able to meet operation costs, interest, and sinking fund. But these have been instances of newly-opened systems, or of systems serving a small population or having a short mileage.

The extent to which the entire financial showing is dependent upon low fares is a matter of conjecture. The municipalities have done successfully what the companies alleged they could not do. They claimed that the fares which were subsequently adopted by the cities would mean bankruptcy. In the very short period of years the passengers doubled and trebled. The result was that a predicted deficit was converted into a handsome profit. Many managers in fact say that financial success was due to low fares. But as the reduced fares were coincident with many improvements in the service, it is impossible to say with confidence to what degree they were the cause.

### MUNICIPAL ELECTRICITY SUPPLY.

The supply of electricity, either by local authorities or private companies, is regulated by the Electric Lighting Acts of 1882 and 1888. All of the important clauses relating to electric lighting have since been consolidated in a general act of 1899. A company desiring to supply a given area, or a city or borough seeking authority for the same purpose, first makes application to the Board of Trade for a provisional order. This order is usually conclusive, and is made only after a more or less exhaustive examination of local conditions, needs, and desires. Thereafter it is necessary for the city or the private company to secure a private act from Parliament confirming the grant. Once secured, however, an order or franchise is generally regarded as exclusive, conferring upon the



municipality or the company the monopoly privilege in the locality. This has been the practice except in London, where some competition has been permitted.

Franchises are granted in perpetuity. In the case of grants to private companies, however, the municipality or local authority is given the right under the act of 1888 to acquire the undertaking at the end of forty-two years. The terms of purchase are the payment by the municipality of the "then value of all lands, buildings, works, materials, and plant of such undertakers suitable to and used by them for the purpose of their undertaking within such jurisdiction, such value to be in case of difference determined by arbitration." But no addition is to be paid "in respect of compulsory purchase, or of good will, or of any profits which may or might have been made from the undertaking."

The local authorities likewise have power to buy out the undertaking before the expiration of forty-two years, and many cities have done so. In this event, however, payment must be made for the unexpired franchises. In those cases where the cities have so purchased, they have been compelled to pay a big price for the franchise. Thus in the city of Liverpool the capital invested by the company was but £264,711 (\$1,288,216), but the city paid £400,000 (\$1,946,600) to acquire immediate possession. Leeds took over a private plant in 1898 for £370,580 (\$1,803,428) whose physical value was but £217,420 (\$1,058,074). Sheffield paid £300,688 (\$1,463,298) for a plant whose physical value was but £124,472 (\$605,743). Birmingham paid £420,000 (\$2,043,930) for a £219,000 (\$1,065,764) plant; and the borough of St. Marylebone, London, was compelled to pay £1,212,000 (\$5,898,198), after arbitration, for a plant whose physical value was but £597,172 (\$2,906,138). The difference between the capital cost and the price paid was for the unexpired franchise or parliamentary order, which had many years to run.

The fact that such high prices had to be paid for franchises stimulated many cities to enter the field and erect their own plants in fear of having the field occupied by a private company. It also led many other cities to buy out existing plants in the early years of their existence in order to anticipate the further increase of the value of their franchises.

In addition to the electric-lighting companies, some twenty-eight power franchises have been granted to private companies for the supply of current in bulk, the idea being to manufacture and sell to large distributors. These are located in populous areas and are designed to sell current to tramways, electric-lighting enterprises, and large consumers. As a matter of fact, in the majority of cases, these private companies have also secured authorization to supply current direct to small consumers.



The private companies are subject to inspection and audit by the Board of Trade, and are required to open their books and documents at all times for this purpose.

In this, as in other enterprises, the supervision of the Board of Trade is most comprehensive, and regulations as to prices for current, etc., are very detailed. In the case of public undertakings the earnings are limited to 5 per cent, and after this sum is earned the charges to the consumer must be reduced.

According to the latest statistics available, there are 334 electric undertakings in operation or construction under the control of local authorities, with a capital investment of £32,000,000 (\$155,728,000), and 174 under the control of private companies, with a capital investment of £27,500,000 (\$133,828,750).

The net result of the taking over of electricity enterprises is more difficult to ascertain than it is in the gas, water, and tramway enterprises. Many of the undertakings have been started within very recent years. The authorities have erected power stations and installed equipment of a more substantial sort than the immediate needs required, and have also extended their conduits so as to invite the widest possible use. It has been the policy to anticipate a probable growth far in excess of present needs.

A conscious policy of making the plant as serviceable as possible to industry, as well as to domestic uses, characterizes the public undertakings. Rates for power purposes are made as low as possible. Some cities undertake by various means to educate the people to the value and economy of the use of electricity. Sheffield maintains an expert staff of engineers, who wire and equip houses and remodel factories and shops. The city rents motors, and in a general way seeks to make the service as inviting as possible. It also manufactures fittings of all kinds and maintains an electrical supply store.

One of the great advantages to the cities has been their ability to coordinate the electric and tramway departments. The latter is relieved of the necessity of erecting a power plant, while the electricity department is given a load on the plant during the day when it is most needed. The tramways pay for their power, although the rate is not so high as for a private consumer, it being adjusted to carry the producing cost and such a proportion of the fixed charges as should be allotted to it.

Of 183 public undertakings reported in the *Electrical Times*, of London, for August 17, 1905, one-half had been in operation less than five years. Sixty-nine of these enterprises showed a deficit in 1904, after the interest on the bonds issued had been paid and the sinking-fund charge had been set aside to provide for the retirement of the debt as required by Parliament. In 25 cases only was the



deficit in excess of £1,000 (\$4,867), and these were almost all in the early years of the working. In some instances, however, the plants had been in operation for a longer period.

At the Tenth Annual Convention of the Incorporated Municipal Electrical Association, held at Edinburgh in June, 1905, Mr. F. A. Newington, the president of the association, in speaking of the showing of public undertakings in Great Britain said:

In connection with the finance of municipal electrical undertakings, it is exceedingly satisfactory to notice how many more towns are now making a profit, and in many instances large profits, as compared with a few years ago. In the table of costs in the *Electrical Times* of 25th May, 1905, the number of municipal electric-supply undertakings, not including tramways, making a profit, is 115, the surplus being about £436,000 [\$2,121,794]. Those showing a loss are 67 in number, the amount being £69,480 [\$338,124]. Of these 67 towns, 42 have only completed their third year of working. The figures given in the table of costs for a corresponding date in 1902 are 46 towns with a surplus of about £89,000 [\$433,119], and 53 towns with a loss of £86,500 [\$420,952].

The rates charged by the public undertakings are usually below those of the private companies. An opportunity for comparison of results is offered by the public and private enterprises operating in the metropolitan area of London. Fourteen undertakings are in the hands of the local authorities, and 15 are operated by private companies. These enterprises operate in different parts of the city. The average rates charged by 12 of the local authorities reporting was 3.17d. (6.44 cents) per kilowatt hour. The average production cost per unit for the same boroughs, not including interest and sinking-fund charges, was 1.68d. (3.41 cents). The average price obtained by the 15 private companies was 3.45d. (7 cents), and the average working cost was 1.66d. (3.37 cents).<sup>(a)</sup>

According to a report issued in July, 1905, by the London County Council, it appears that the plants of the private companies are very much larger than those of the local authorities, the former having an annual revenue of £1,498,717 (\$7,293,506) as against £400,668 (\$1,949,851) of the latter. If any advantage existed it was therefore on the side of the private enterprise.

The financial results of individual cities will be later dealt with in detail. But the ultimate and large returns to the public in lower charges and in relief of taxation can be expected only in the years to come, when the use has grown up to the investment, which has been made in anticipation of the future.

The most common criticism of electric-lighting undertakings is

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<sup>a</sup> These figures are obtained from the August 17, 1905, number of the *Electrical Times*, of London, an authoritative trade publication.



their alleged failure to provide sufficient depreciation allowances. Speaking of the policy in this regard, Mr. Newington, in the address above referred to, said:

Depreciation of plant is closely connected with the reserve fund. If the loans are paid off in twenty-five or thirty years and the reserve fund is made up to the full amount, is it necessary to further depreciate the plant? This largely depends upon the life of the plant, and if this will, on the average, last the period of the loan, there does not seem to be any need of a depreciation fund, as far as the life of the plant is concerned. Municipal undertakings in this respect are working under different conditions to companies. Electricity supply companies have a definite number of years, forty-two in most cases, during which they are given statutory powers to supply electricity in a given area, but at the end of that period the local authorities can buy up the undertaking, not as a going concern, but simply at the then value of the plant. That is, the business connection which the company has built up during these years, or good will, is not worth anything.

Now consider a municipal undertaking. The capital has to be paid off in from twenty-five to thirty years, as a rule. At the end of this period how do we stand? Buildings will still be quite good; the copper in the mains will be of very considerable value even if the insulation is not, and if our machinery has been kept in good order by general maintenance and perhaps by calling on the reserve fund for special cases, our successors will be in the very comfortable position of having a good business bequeathed to them along with a very considerable amount of plant without having to pay anything for it. The loan having been paid off they will be free to borrow again to replace machinery if necessary. Moreover, if the local authority at any time during the period of the loan or after, is desirous of selling the undertaking, judging from towns where the local authority has purchased from a company, it will be able to command a very considerable sum for good will. It seems, therefore, that local authorities are very much better situated in this respect than are companies.

Inasmuch, therefore, as Parliament requires the municipality to provide a sinking fund adequate to repay the entire capital debt within a given number of years, estimated at the approximate life of the plant, the demand for further depreciation loses much of its force.

The rates for electric lighting vary greatly. While a maximum charge is provided by Parliament which differs with different localities, the actual charge is very much below this limit. The following table shows for the year 1904-5 the average prices received for current furnished for various uses and the working cost (exclusive of interest, sinking fund, and depreciation charges) per kilowatt hour.



AVERAGE PRICE AND PRODUCTION COST PER KILOWATT HOUR OF ELECTRICITY SUPPLIED BY UNDERTAKINGS OPERATED BY LOCAL AUTHORITIES, FOR SELECTED CITIES, 1904-5.

[From reports furnished by town clerks.]

City.	Population, 1901.	Average price per kilowatt hour for—				Working cost per kilowatt hour.
		Private lighting.	Public lighting.	Power.	Tramways.	
Aberdeen .....	153,108	<sup>a</sup> \$0.0744	\$0.0524	<sup>a</sup> \$0.0744	\$0.0279	\$0.0217
Barrow .....	57,586	<sup>a</sup> .0843	.0600	<sup>a</sup> .0843	.0394	.0299
Bath .....	49,817	.0963	.0511	-----	-----	.0455
Belfast .....	348,965	.0586	.0333	.0298	-----	.0240
Birmingham .....	522,182	.0807	-----	.0369	-----	.0321
Blackburn .....	127,626	.0770	.0406	.0251	.0304	.0207
Bolton .....	168,215	.0689	.0599	.0229	.0223	.0132
Bradford .....	279,767	.0735	.0532	.0267	.0203	(b)
Cardiff .....	164,420	.0603	.0361	.0288	-----	(b)
Carlisle .....	45,478	<sup>a</sup> .0770	.0566	<sup>a</sup> .0770	.0331	.0371
Chester .....	36,281	.0811	-----	.0254-.0406	.0355	.0260
Coventry .....	69,978	.0770	.0513	.0248	-----	.0235
Darlington .....	44,496	.0811	.0481	.0254-.0304	.0254	.0190
Dewsbury .....	28,050	.0882	.0797	.0398	.0302	.0263
Dundee .....	160,871	.0738	.0420	.0406	.0271	.0292
Glasgow .....	760,423	.0609	.0378	.0255	-----	.0163
Halifax .....	104,936	.0730	.0603	.0365	.0304	.0193
Hanley .....	61,524	.0894	.0538	.0349	-----	.0483
Huddersfield .....	95,047	(b)	(b)	(b)	(b)	.0263
Hull .....	240,618	.0823	.0363	.0268	-----	.0253
Ipswich .....	66,622	<sup>a</sup> .0686	-----	<sup>a</sup> .0686	.0304	.0289
Lancaster .....	40,329	.0709	.0386	.0386	.0386	(b)
Leeds .....	428,968	.0722	.0254	.0272	-----	.0197
Leicester .....	211,579	.0811	-----	.0406	-----	.0298
Liverpool .....	684,947	.0729	.0406	.0366	.0235	.0165
Lowestoft .....	29,842	.0827	.0377	.0406	.0457	.0469
Manchester .....	543,872	.0780	.0406	.0240	.0302	.0215
Middlesbrough .....	91,302	.0831	-----	.0280	-----	.0276
Nottingham .....	239,743	.0674	.0459	.0254	.0254	.0215
Warrington .....	64,242	.0422	.0618	.0258	.0325	.0178

<sup>a</sup> Average price for light and power.

<sup>b</sup> Not reported.

The above are the average prices received. In the larger cities prices are generally lower than in the smaller ones. Different charges are made for lighting and power, while a special price is furnished the tramway undertakings. Further data on the subject, together with the financial operations of the different towns, will appear subsequently.

## PUBLIC TELEPHONE SERVICE.

The telephone service in Great Britain has always been treated as a national rather than a local enterprise. It has been looked upon as an adjunct to the telegraph, and as ultimately a matter of public operation by the post-office department. With the exception of a few municipal undertakings, the telephone service of the Kingdom is in the hands of the National Telephone Company. Its powers were obtained from Parliament, and extend to local as well as long-distance traffic. Under the grant or franchise they can enter any city, open an exchange, tear up the streets, and establish the enterprise irrespective of the wishes of the town council.

The grant from the Government was not in perpetuity, but expires



by limitation in 1911. Before that time, however, the service for the entire United Kingdom will be taken over by the Government and worked by the post-office department, as is the postal and telegraph service.

The trunk lines are already in the hands of the post-office department. Terms of purchase were agreed upon in 1896, the price being £459,114 (\$2,234,278). The local service will become a public undertaking under municipal or national control within a comparatively short time.

According to a report issued by the telephone department of the corporation of Glasgow, the annual rates for unlimited service charged by the National Telephone Company were £17 (\$82.73) for London, £10 (\$48.67) in the provinces, and £8 10s. (\$41.37) in some smaller towns. From the same report it appears that the charges for service in Germany under Government control vary with the number of exchanges in use. Where the number of connections is 50 or less, the charge is £4 (\$19.47) per annum; where the subscribers are from 500 to 1,000, the rate is £7 10s. (\$36.50); where they exceed 20,000 in number, the charge is £9 (\$43.80) for unlimited service. In Brussels the rate is £10 (\$48.67), and in Holland, £7 10s. (\$36.50). The rate for long-distance conversation for a three-minute period, taking 500 miles as a typical instance, is 2.75 francs (53 cents) in France, 1½ marks (36 cents) in Germany, and 1 krone (27 cents) in Sweden.

In this, as in all other public-service undertakings, it has been the policy of Parliament to confer a monopoly under regulations. At the same time this rule was departed from to some extent in the act of 1899, by the terms of which municipalities were empowered to conduct telephone undertakings, after having obtained a license from the postmaster-general. But the Government has been loath to make such grants, owing to the fact that the entire enterprise is looked upon as a national rather than a local one, which reason has been strengthened by the disinclination to enlarge the powers of the cities. Despite this fact private acts or licenses have been obtained by the towns of Guernsey, Glasgow, Portsmouth, Swansea, Brighton, and Hull. Tunbridge Wells also inaugurated a public exchange, but subsequently transferred it to the National Company. The cities of Manchester, Salford, and Stockport, which are closely adjacent, are considering the inauguration of a joint exchange, while the cities of Cambridge, Bournemouth, Belfast, Oldham, Burnley, Aberdeen, and Barrow-in-Furness are considering the introduction of municipal telephones.

The cities which have installed their own system have generally been moved to do so by reason of the excessive charges and bad



service of the private company, for the telephone service in Great Britain, under private or public authority, is less efficient in every way than that in America or Germany. Connections are slower and the transmission not so distinct.

A detailed discussion of the undertaking in Glasgow appears elsewhere. The Guernsey exchange is the oldest public exchange in Great Britain. It was opened in 1898, and is in the seventh year of its working. The population of the island is 40,300, and the number of telephones installed are one to every 33 of the population.

The rates of charges in Guernsey are as follows: £5 (\$24.33) per annum and 3,200 calls without further payment; £2 5s. (\$10.95) per annum and  $\frac{1}{2}$ d. (1 cent) per call; £1 10s. (\$7.30) per annum and 1d. (2 cents) per call. Only the first rate entitles the subscribers to free calls, and these are limited to 3,200. The other rates provide for an annual charge for installation and a charge for every call. The total cost of the installation, including £2,322 (\$11,300) for land, was £23,584 (\$114,772), and the revenue account for the fiscal year 1903 was as follows:

Total receipts from connections and service	\$19, 779
<hr/>	
Expenditures :	
Working expenditures	\$4, 521
Office expenses	1, 294
General expenses	7, 373
Expenses in connection with construction	194
Reserve account for sinking fund and depreciation	5, 416
Total	18,798
Net profit for the year	981

In the city of Brighton, with a population of 126,286, the charge for unlimited service is £5 10s. (\$26.77), with a toll rate of £3 10s. (\$17.03), and 1d. (2 cents) for every call. This with the Hull, Portsmouth, and Swansea undertakings were installed in 1903 and 1904, and complete financial statements of the undertakings are not available. The annual rate for unlimited service in these towns is as follows: In Hull, with a population of 240,702, the rate is £6 6s. (\$30.66); in Portsmouth, which has a population of 189,625, the rate is £5 17s. 6d. (\$28.59); and in Swansea, with 94,514 population, the rate is £5 (\$24.33).

## THE BRITISH MUNICIPALITY AND LABOR.

The British city aims to be a model employer. In this respect it has adopted a conscious policy of betterment. It has set its influence against the sweating system, not only in its own departments, but for all contractors who work for the city. Its aim is to raise the stand-

ard of living of its employees, and by so doing better the conditions of private employment.

This policy met with some resistance at first. It was started by the London County Council, and has since become the almost universal policy of other local governing boards. This programme has been adopted, not so much from coercion or influence from organized labor as from the ideals of the town councils themselves.

In city work the trade-union rate of wages and hours is generally adopted. This is true in all organized trades, such as building, engineering, and mechanical works. For unorganized employees and persons engaged on miscellaneous work, the council has established a standard rate of wages which corresponds with the wage scale of organized labor.

This policy of wage betterment is seen—

1. In the treatment of the employees of the public-service undertakings as well as of the other enterprises carried on by the community.

2. In the compulsory enforcement of a fair wage scale upon all contractors undertaking work for the city.

3. In the establishment of "works departments" for the performance of municipal work directly, without the interference of private contractors.

The number of municipal employees has rapidly increased in recent years. This is largely due to the taking over of the reproductive undertakings, as well as the general reconstruction of the physical basis of the British city, due to the necessities of modern city life. The chief increase came in through the tramway undertakings. The general policy of the cities as to their employees is fairly indicated by the improvement in the treatment of the men taken over from the private companies. In 1903 Mr. Alfred Baker, at that time chief officer of the London County Council tramways, presented a paper to the annual meeting of the Municipal Tramways Association of Great Britain. The title of the address was "Hours of labor and rates of pay obtaining in various municipal undertakings in Great Britain."

Mr. Baker said:

I find, taking the maximum rate of pay in all cases, for motormen, and conductors, that the average over the whole county is as follows: Motormen  $6\frac{1}{4}$ d. [ $12\frac{1}{2}$  cents] per hour; conductors  $5\frac{1}{4}$ d. [ $10\frac{1}{2}$  cents] per hour. This works out, taking sixty hours a week, as the same standard, at 31s. 3d. [\$7.60] for motormen and 26s. 3d. [\$6.39] for conductors.

As an example of the great benefits tramway workers have derived from the transference of undertakings from companies to municipalities, I set out a table showing the hours per week in a number



of towns under the companies, together with the hours now worked under municipal control:

Town.	Hours per week under company.	Hours per week under corporation.
Burnley .....	72	60
Bolton .....	78	60
Sunderland .....	84	60
Bradford .....	70 to 80	60
Hull .....	80	60
Manchester .....	70	54
Leeds .....	81	64½
London .....	78	60
Birkenhead .....	91	65
Wallasey .....	95	63
Glasgow .....	76	54

During the last five years, under municipal control and largely by the aid of electric traction, although not in every case, tramway-men's hours have been reduced by 48 per cent, and at the same time their wages increased by not less than 42 per cent.

In London it has cost the Council upward of £40,000 [\$194,660] a year to give its servants a sixty hours' week, and a decent living wage.

This policy of shorter hours and higher pay is apparent from the following table, showing the rates of pay and the hours of labor under four private tramway companies prior to their acquisition by the London County Council, and the wages and hours subsequently established:

WEEKLY WAGES AND DAYS AND HOURS OF LABOR OF TRAMWAY EMPLOYEES IN LONDON UNDER FOUR PRIVATE COMPANIES AND AFTER THE ACQUIREMENT OF THE TRAMWAYS BY THE LONDON COUNTY COUNCIL, BY OCCUPATIONS.

Occupation.	Under company management.								
	London Tramways.			Southeast Metropolitan.			South London Tramways.		
	Weekly wages.	Days worked per week.	Hours worked per week.	Weekly wages.	Days worked per week.	Hours worked per week.	Weekly wages.	Days worked per week.	Hours worked per week.
Drivers or motormen	\$7.66-\$10.22	7	80	\$8.09-\$10.22	7	77	\$6.39-\$7.66	7	70
Conductors .....	7.66- 10.22	7	80	8.09- 9.37	7	77			
Stablemen .....	5.60- 7.30	7	77	-----	-----	-----			
Washers .....	5.35- 6.81	7	77	7.10	7	70	6.16- 6.81	7	77
Farriers .....	8.03- 8.76	6	56½	-----	-----	-----	8.09	7	70
Track cleaners .....	5.11- 5.96	7	77	-----	-----	-----	8.76-10.22	6	57
Pointsmen .....	3.65- 4.87	7	77	-----	-----	-----	5.11	7	70
Trace boys .....	3.65- 4.38	7	77	3.16	7	60	-----	-----	-----
Ticket inspectors .....	9.73- 10.22	7	80	7.79- 8.72	7	77	3.89	7	70
Regulators .....	-----	7	80	-----	-----	-----	9.12	7	81
Night inspectors .....	7.79- 10.22	7	74	-----	-----	-----	8.52	7	81
Foremen .....	8.76- 13.38	7	80	a 8.52	7	70	9.79	7	81
Deputy foremen .....	9.73	7	80	-----	-----	-----	10.95-15.82	7	84
							9.12	7	84

a Foreman washer.

WEEKLY WAGES AND DAYS AND HOURS OF LABOR OF TRAMWAY EMPLOYEES  
IN LONDON UNDER FOUR PRIVATE COMPANIES AND AFTER THE ACQUIRE-  
MENT OF THE TRAMWAYS BY THE LONDON COUNTY COUNCIL, BY OCCUPA-  
TIONS—Concluded.

Occupation.	Under company manage- ment—London, Deptford, and Greenwich.			Under management of Lon- don County Council.		
	Weekly wages.	Days worked per week.	Hours worked per week.	Weekly wages.	Days worked per week.	Hours worked per week.
Drivers or motormen .....	\$8.09-\$9.79	7	77	\$6.93-\$9.12	6	60
Conductors .....	8.09- 8.94	7	77	6.93- 9.12	6	60
Stablemen .....	6.57	7	70	6.33	6	60
Washers .....	6.57- 7.91	7	70	6.08- 7.30	6	60
Farriers .....				9.49-10.58	6	60
Track cleaners .....				6.08	6	60
Pointsmen .....				5.84	6	60
Trace boys .....				3.41- 4.38	6	60
Ticket inspectors .....	8.94- 9.79	7	91	10.22	6	60
Regulators .....	9.37	7	91	10.22	6	60
Night inspectors .....	9.79	7	91	10.22	6	60
Foremen .....	10.22	7	84	10.22-15.69	7	70
Deputy foremen .....				10.22	7	70

Other cities have adopted a similar policy. In fact the condition of the employees was one of the strongest motives for taking over the tramways. The men were compelled to work from seventy to eighty hours a week. In some instances their hours amounted to ninety a week. In addition to this wages were low. This affected the service, aggravated the public, and led to constant friction with the town council. Unable to correct the grievances of the employees by compulsory regulation, the cities were forced to the conviction that improvement could come only through public ownership. Wages were increased in many instances. In most instances hours were shortened. A nine and one-half to ten hour day was uniformly adopted, with the men working six days a week instead of seven. In addition to this, the cities generally furnish the conductors and motormen with free uniforms and several days' holiday each year on full pay. Provision is also made for an increase in wages as the term of service increases, and in some cities a bonus is offered in the form of increased wages to those employees whose cars are free from accident for a certain length of time. The cost of the improvement of the condition of the employees in the city of Liverpool is said to amount to upwards of £40,000 (\$194,660) a year, and in Glasgow to over \$500,000 a year. Clubs, gymnasiums, cafés, and means of recreation are found in connection with many tramway departments, as are superannuation funds and plans for insurance. One-third of the amount contributed to the benefit societies is usually provided by the municipal undertaking. Sick pay and medical attendance, with death benefits, are usually provided. Some of the cities have undertaken to stimulate recreation and the organization of the men in a social way. The Liverpool society has an athletic field, which is



utilized for ball, cricket, and other games. Annual sports are held here. The same department maintains a tramway band. The cities seem to be zealous in increasing the comfort and happiness of their employees, and manifest a fraternal oversight as to their health and comfort. It is said that all this is met by a corresponding response on the part of the employees. The incentive to good work and the premiums on carefulness improve the efficiency of the service and render the men very jealous of their jobs.

It is said that politics does not enter into municipal employment. The managers of the departments are generally free from interference by the town council in this regard. As indicative of this freedom, the following note, which is posted in the office of the tramways department in Manchester, is suggestive. The notice is from the tramways committee of the council, and is as follows:

*“Resolved, That all letters from members of the council be ignored (in the employment of men), and that a preference be given to those men who apply in the legitimate way.”*

There is no motive for political organization in the English city. There is no place for the boss or the machine. The form of government by council, with the method of ward nomination by petition, makes the spoils system of little value, even if it could otherwise exist. The number of employees in the English city form an increasing and substantial part of the population.

The ordinary employees of the tramways, gas, and water departments are not organized into unions, although occasional efforts have been made to so organize them. The artisans and skilled employees, however, are usually unionized. The city is responsive to all reasonable demands of the men, who make their complaints to the manager or the committee of the town council.

So far as ascertained there has never been a strike of municipal employees, or a serious controversy with a city. Occasional suggestions are heard that the increase in the number of employees is a menace to a free electorate, but even the critics have cited few instances of any efforts or suggestions of municipal employees that look like political activity or a coercion of officials. The English public is as jealous of its service as it is just to its employees.

Glasgow and the London County Council have pursued the most consistent policy in their relation to labor. In both cities the contractor has been compelled to compete with direct labor, while “fair” wage clauses have been adopted in all public work. The same policy, although to a somewhat less degree, has been adopted by other cities. These two cities are typical of the best.



**GLASGOW.**

The corporation of Glasgow does most of its work by direct labor. This is true of the tramways, the gas, the water, and the electricity departments, as well as of the street cleaning, the sewage, the sanitary, the health, and other departments. Direct labor has gradually supplanted the contractor. The tramways department employs over 4,400 men in all branches of the service. An immense workshop has been erected, fully equipped for the manufacture and repair of cars and car appliances. Nearly all of the cars of the department have been built in these shops.

The fire department makes all of its own carts and equipment, and even manufactures the boots for the men. These works are located at the central station, where all of the men reside. The firemen are chosen from the ranks of artisans and are employed as such when not on active service. All of the repair and maintenance work in the city, on the streets, sewers, and elsewhere is done by direct labor in the same way, and a portion of the immense intercepting sewer system has been done without the intervention of a contractor. The claim is made that this policy is more efficient, more economical, and enables the city better to supervise its work.

As already stated, the total number of municipal employees in the city is between 15,000 and 16,000, or about one-tenth of the voting population. These men are chosen by competitive process, although the regulations as to admission to the service are left to the control of the council committees or the heads of the departments. There is apparently no necessity of a civil-service law, as the traditions of service in Great Britain render anything like the spoils system impossible. Men are retained during good behavior, and political affiliations have nothing to do with a man's employment, retention, or advancement.

In consequence the city secures a high order of ability in its service. Aside from security of tenure, the city has established a standard of wages which is always as high as that of the unions. In case of dispute the city adopts the trade-union scale, not because of influence or fear, but because of a standing order of the council that has made such action customary. In many departments the rate of wages paid, as well as the hours of employment, are better than in private employment.

In none of the large departments, like the tramway and gas, have the men organized into unions. In the case of artisans employed temporarily or in small groups, the unions remain, but the city has expressed its indifference to the attitude of the men toward them.

There are no instances of organization on the part of the men for the purpose of electing councilmen or of intimidating the officials.



Some fear of this has been expressed by public officials, but so far as inquiry could discover it was merely an anticipation of a danger which has not yet arisen.

During certain periods of distress, when large numbers of men were out of employment, some departments have organized and promoted undertakings of a necessary sort for the affording of temporary relief.

### **LONDON COUNTY COUNCIL.**

The London County Council is the most important administrative agency in the area of London. It is also the most progressive in its policies. It has worked out a labor policy which has been extensively copied throughout Great Britain.

The general programme of the Council is as follows:

1. The payment by the city of the rate of wages and the observance of hours and the conditions of labor established by the trade unions. Where no rate of wages has been established or a union does not exist, the Council itself adopts a proper wage scale.
2. The direct employment of labor wherever practicable in preference to contractors.
3. Whenever necessary to employ a contractor to insist upon the insertion in the contract of certain clauses similar to those adopted by the Council (with penalties for their breach), stipulating—
  - a. Against subletting or sweating.
  - b. For the payment of trade-union wages and the observance of trade-union hours and conditions for each trade as defined by a schedule attached to each contract.
4. As far as possible work is found for the unemployed by cooperation with other public bodies or by such an arrangement of public works as will increase employment during the slack season.
5. The establishment of labor bureaus or registry for the employment of both sexes.

The policy of performing public work by the direct employment of labor is designed to prevent combinations of contractors, to insure proper work being done, as well as to enable the Council to carry out many things which can not be done by contract. In order to do this, a "works department" has been organized. A large workshop has been equipped for all sorts of building work. A general staff is employed which has from 3,000 to 4,000 men on the pay roll. Whenever the Council contemplates any extensive improvement, such as the erection of buildings, the building of sewers, or the like, it asks for bids from the works department as well as from private contractors. It thus has competitive bidding from the inside, and the contract is awarded either to the city's own shops or to private parties.



The department has been in operation for thirteen years. During six months of 1905 it completed work and contracts to the value of over £400,000 (\$1,946,600). It has built the engine houses and model dwellings for the Council. It carried through the clearance of the Kingsway from Holburn to the Strand and has constructed sewers and built streets. It does all sorts of repair work. It is managed by competent men, pays the union rate of wages, and is gradually taking to itself most of the construction and repair work of the Council.

There is much discussion as to the propriety of this department. During its early years it was a source of expense to the Council, owing partly to its newness, partly to the constant change of policy adopted toward it. In recent years it seems to have justified itself and has been of service in insuring a good quality of work, in preventing combines among contractors, and in enabling the city to carry out many emergency jobs.

In all work let to contractors the effort is made to insure proper wage conditions. The contractor is held to a strict observance of the wage schedule. The policy of the council is to insure a living wage and to aid in the establishment of a general trade-union standard in all employment.

The London County Council was a pioneer in these regards. Its standing orders have been gradually adopted by other cities, until the policy is almost universal in Great Britain of paying trade-union wages and insuring similar treatment from contractors. In like manner the more progressive town councils have adopted works departments for the carrying out of their enterprises.

#### **RULES OF LONDON COUNTY COUNCIL AS TO WAGES AND HOURS OF LABOR.**

Inasmuch as inquiries are frequently received by the London County Council for copies of its standing rules, as to wages and conditions of labor, the ordinance of the Council is set out in full as follows:

244. (1) There shall be kept at the county-hall a list of the rates of wages and the hours of labor to be paid and observed by the Council in works which are in the nature of construction or manufacture, and which the Council may resolve to carry out without the intervention of a contractor on a site wholly or partially within a radius of 20 miles measured in a straight line from Charing Cross.

The list shall be settled by the Council on the recommendation of the works committee, and shall be based on the rates of wages and hours of labor recognized by associations of employers and trade unions and in practice obtained in London, and shall form part of the standing orders of the Council.

The list shall, upon the recommendation of the works committee, be from time to time revised by the Council so as to keep it at all times as far as possible in accordance with the rates of wages and hours of labor for the time being recognized by associations of employers and trade unions and in practice obtained in London



Where in any trade there is no trade union the Council shall fix the rates of wages and hours of labor, and shall from time to time revise the same as may be necessary.

The list shall at all times be open to public inspection.

(2) In inviting tenders for works in the nature of construction or manufacture to be executed within a radius of 20 miles measured in a straight line from Charing Cross or on a site partly within and partly outside the radius, the advertisements and instructions or tender shall state that in the case of all workmen to be employed by the contractor he will be required to pay wages at rates not less, and to observe hours of labor not greater, than the rates and hours set out in the Council's list, and that such rates of wages and hours of labor will be inserted in a schedule to and will form part of the contract, and penalties shall be enforced for any breach thereof, and if the contractor employ any workman or workmen in any trade not included in the Council's list, the rates of pay shall not be less, nor the hours of labor more than those recognized by associations of employers and trade unions and in practice obtained in London.

As regards each contract the list shall be that in force at the date of the tender.

245. When the contractor in connection with the works contracted for intends to employ labor beyond the site of such works and a radius of 20 miles aforesaid from Charing Cross, he shall be required, in addition to the above, to insert in the said schedule the names of the various classes of labor which he intends to employ, together with the places where such labor will be employed, and the rates of wages and hours of labor to be paid and observed in respect to each class of labor, and no tender shall be accepted unless the rates of wages and hours of labor inserted in such schedule be proved to be the rates and hours recognized at the date of the tender by associations of employers and trade unions and in practice obtained in the district where the work is to be done, and such schedule will be added to and will form part of the contract, and penalties shall be enforced for any breach thereof.

246. (1) In all contracts for the supply of raw material or manufactured articles, other than general contracts for the supply of stores to be used in maintenance, a clause shall whenever practicable be inserted that, with respect to all materials or articles produced or manufactured or supplied by the contractor, the contractor will in the production or manufacture or supply thereof (as the case may be) pay and observe the following rates of wages and hours of labor, viz :

(a) Where the production or manufacture or supply thereof is carried on within a radius of 20 miles aforesaid from Charing Cross, the rates of wages and hours of labor appearing in the Council's list, and if the contractor employ any workman or workmen in any trade not included in the Council's list, the rates of pay shall not be less, nor the hours of labor more than those recognized by associations of employers and trade unions and in practice obtained in London.

(b) Where the production or manufacture or supply thereof is carried on beyond a radius of 20 miles aforesaid from Charing Cross, the rates of wages and hours of labor recognized by associations of employers and trade unions and in practice obtained in the district where it is carried on.

(2) But any committee shall have power to insert the said clause in any contract for stores when the conditions of purchase will allow it: *Provided*, That in the case of articles manufactured at places beyond a radius of 20 miles aforesaid from Charing Cross the London rates of wages and hours of labor shall not apply or be required in respect of the manufacture, although the articles are supplied within that limit.

247. In the case of contracts for works in the nature of construction or manufacture all instructions for tender and contracts shall respectively, as far as possible, contain the following statements and clauses:

*In the instructions for tender.*

Tenders must be on the annexed form, and be accompanied by the annexed form of contract and the schedules thereto.

The contract will bind the contractor to pay to all workmen (except a reasonable number of his legally bound apprentices) employed by him wages, and wages for overtime, at rates not less, and to observe and cause to be



observed by such workmen, hours of labor not greater, than those provided for by the schedule to the form of contract.

As regards all work to be done at the site mentioned in the specification in the first schedule to the form of contract, or elsewhere within a radius of 20 miles measured in a straight line from Charing Cross, in the county of London, the minimum rate of wages and wages for overtime, and the maximum hours of labor, will be found set out in the list forming Part I of the schedule.

As regards all work to be done outside the site and the radius aforesaid, the tenderer must before delivering his tender complete the list of rates of wages, wages for overtime and hours of labor forming Part II of the said schedule, by specifying the place or places outside the site and the radius aforesaid at which any work is proposed to be done, and by filling into the proper columns against each trade specified the rates of wages, wages for overtime and hours of labor proposed to be paid and observed by the tenderer, which must be those at the date of the tender recognized by associations of employers and trade unions and in practice obtained in the district in which the work is to be done.

The contract will also forbid the contractor to assign or underlet the contract or any part of it or subcontract except with the consent of the Council and upon such conditions as they may think fit, but if the tenderer at the time of tendering states his desire to sublet or subcontract for any portions of the work not usually done by him, the Council will agree to such subletting or subcontracting to or with an approved person, the principal contractor being responsible to the Council for the work being done under the same conditions as if done by himself.

On the foregoing heads, and generally, reference should be made to the form of contract.

*In the form of contract.*

A. The contractor shall at all times during the continuance of this contract abide by, perform, observe, fulfill, and keep all and singular the stipulations following, that is to say—

(1) The contractor shall pay all workmen (except a reasonable number of his legally bound apprentices) employed by him in and about the execution of this contract or any part thereof wages, and wages for overtime respectively, at rates not less than the rates stated in the schedule hereto, and for each and every breach by the contractor of this stipulation, and notwithstanding the condonation of any prior or other breach, the contractor shall on demand pay to the Council as liquidated damages, and not as a penalty, the sum of £5 [\$24.33].

(2) The contractor shall observe and cause to be observed by all such workmen hours of labor not greater than the hours of labor stated in the said schedule, and for each and every breach by the contractor of this stipulation, and notwithstanding the condonation of any prior or other breach, the contractor shall on demand pay to the Council as liquidated damages and not as a penalty for each day on which any such breach shall be committed, and for each workman in respect to whom it shall be committed, the sum of 5s. [\$1.22] per hour for every hour during which, on each day, each such workman shall be employed by the contractor beyond the maximum number of hours stated in the said schedule: *Provided*, That this stipulation shall not be construed to prohibit overtime, if such overtime be in accordance with the rules of the trade unions concerned.

(3) The contractor shall at all times during the continuance of this contract display and keep displayed upon the site of the works and in every factory, workshop or place occupied or used by the contractor in or about the execution of this contract in a position in which the same may be easily read by all workmen employed by the contractor in or about the execution of this contract, a clearly printed or written copy of the said schedule hereto.

(4) The contractor shall at any time and from time to time during the continuance of this contract, whenever called upon so to do by the clerk for the time being of the Council, produce to such officer or officers of the Council as the clerk may direct, the time and wages books and sheets of the contractor in order to show to the satisfaction of such officer or officers whether or not the stipulations contained in this clause have been and are being complied with.

(5) Should any workman in the employment of the contractor be not paid the scheduled rate of wages, the Council may pay to any workman or workmen who may have been underpaid the difference between the amount of wages which he may have been paid by the contractors and the amount which he



would have been paid if the stipulation as to wages had been observed, and may deduct from any moneys due or to become due to the contractor under the contract the amount of the said difference so paid to such workman or workmen.

B. The contractor shall not, without the written consent of the Council under the hand of its clerk, which consent may be given subject to such conditions (if any) as the Council may think fit to impose, assign or underlet this contract or any part thereof, or make any subcontract for the execution or performance of the said works or any part thereof, and for each and every breach by the contractor of this clause the contractor shall, notwithstanding the condonation of any prior or other breach, on demand pay to the Council as liquidated damages and not as a penalty the sum of £200 [\$973.30].

C. Any sum or sums of money which on breach by the contractor of any one or more of the stipulations aforesaid in clauses A and B, may from time to time become payable by the contractor to the Council as liquidated damages, may either be recovered by the Council from the contractor by action or other legal proceedings, or may be deducted and retained by the Council out of any moneys due or to become due from the Council to the contractor under this contract, or the Council may obtain payment thereof, partly in the one mode and partly in the other.

In case of any breach by the contractor of any one or more of the stipulations aforesaid in clauses A and B, or of any one or more of the provisions contained in the schedule hereto, it shall be lawful for the Council (and instead of claiming payment to them by the contractor of the liquidated damages, if any, payable by the contractor as aforesaid in respect of such breach), to determine this contract in the same manner and to the same extent as they have power to determine the same under clause (a) in the events therein mentioned, and if this contract shall be determined under this present power, then all the provisions of that clause shall apply as if this contract had been determined under that clause.

THE SCHEDULE.

RATES OF WAGES AND HOURS OF LABOR.

PART I.

For all work done at the site mentioned in the specification in the first schedule, or within a radius of 20 miles, measured in a straight line from Charing Cross, in the county of London.

Trades.	Rate of pay per hour.	Hours of labor per week.			Rate of pay for overtime.				
		Summer.	Winter — twelve weeks after second Monday in November.		Week-days (except Saturdays).			Saturdays.	
			Three weeks at beginning and three weeks at end.	Six middle weeks.	Until 8 p. m.	8 p. m. until 10 p. m.	After 10 p. m.	Until 4 p. m.	After 4 p. m., and Sundays, Xmas Day and Good Friday.

Part I of this schedule is believed to include all the trades which the contractor may require to employ in or about the execution of this contract at the site mentioned in the specifications in the first schedule or within the radius aforesaid. If, however, he should employ at the site aforesaid, or within the radius aforesaid, any workman or workmen in any trade not so included, the rate of wages and rate of wages for overtime to be paid to such workman or

<sup>a</sup> This will be the general clause in the contract giving the Council power to determine it or to put the work in the hands of other contractors at the cost of the original contractor.



workmen are not to be less, and his or their hours of labor are not to be more, than the rate of wages and the rate of wages for overtime and hours of labor respectively, which at the date of the contractor's tender were recognized by associations of employers and trade unions and in practice obtained in London.

PART II.

For all work done outside the site aforesaid and a radius of 20 miles measured in a straight line from Charing Cross, in the county of London, namely, at \_\_\_\_\_, where all work not done on the site or within the radius aforesaid is intended to be done.

Trades.	Rate of pay per hour.	Hours of labor per week.			Rate of pay for overtime.				
		Sum-mer.	Winter — twelve weeks after second Monday in November.		Week-days (except Saturdays).			Saturdays.	
			Three weeks at beginning and three weeks at end.	Six middle weeks.	Until 8 p. m.	8 p. m. until 10 p. m.	After 10 p. m.	Until 4 p. m.	After 4 p. m., and Sundays, Xmas Day and Good Friday.

Part II of this schedule is believed to include all the trades which the contractor may require to employ in or about the execution of this contract outside the site and radius aforesaid. If, however, he should employ outside the site and radius aforesaid any workman or workmen in any trade not so included, the rate of wages and rate of wages for overtime to be paid to such workman or workmen are not to be less, and his or their hours of labor are not to be more than the rate of wages and rate of wages for overtime and hours of labor respectively, which at the date of the contractor's tender were recognized by associations of employers and trade unions and in practice obtained in the district in which the work is done.

248. There shall be inserted in every contract a clause prohibiting the contractor from entering into any subcontract without the consent of the Council, and in granting such consent the Council shall require the contractor to enter into an agreement which will secure the observance of the following conditions viz:

That no subcontract shall operate to relieve the contractor from any of his liabilities or obligations, and that the contractor shall be responsible for all the acts, defaults and neglects of the subcontractor as fully as if they were the acts defaults and neglects of the contractor, and that there shall be inserted in the subcontract a covenant by the subcontractor that he will pay all workmen employed by him in or about the execution of such subcontract rates of wages not less, and observe and cause to be observed by such workmen•hours of labor not more than the rates of wages and hours of labor following, that is to say, as regards all work done upon a site, any part of which is within a radius of twenty miles, measured in a straight line from Charing Cross, the rates of wages and hours of labor set out in the schedule appended to the original contract as applicable to work done within such radius and as regards all other work such rates of wages and hours of labor as at the date of the subcontract are recognized by associations of employers and trade unions and in practice obtained in the several districts where the work is done, and that such rates of wages and hours of labor be inserted in a schedule to the subcontract, but in no case shall such rates of wages be less or hours of labor greater than those set out in the wages and hours schedule of the contract between the Council and the contractor, and that in case of any breach by the subcontractor of the covenant as regards rates of wages and hours of labor to be inserted in any subcontract (and notwithstanding the connivance of the contractor in or condonation by such contractor of such breach or any prior breach) the contractor shall for



every such breach as regards the rates of wages on demand pay to the Council as liquidated damages, and not as a penalty, the sum of £5 [\$24.33], and shall for every such breach as regards the hours of labor on demand pay to the Council as liquidated damages, and not as a penalty, for each day on which such breach shall be committed, and for each workman in respect to whom it shall have been committed, the sum of 5s. [\$1.22] per hour for every hour during which such workman shall have been employed by the subcontractor beyond the maximum number of hours during which under the terms of the said covenant he ought to have been employed.

And that the subcontractor shall at all times, during the continuation of the subcontract, display and keep displayed on the works and in every factory or workshop, or place occupied or used by the subcontractor in or about the execution of the subcontract, in a position in which the same may be easily read by all workmen employed by the subcontractor in or about the execution of the subcontract, a clearly printed or written copy of the said schedule and that the subcontractor shall at any time, and from time to time during the continuance of the subcontract, whenever called upon so to do by the clerk of the Council, produce to such officer or officers of the Council as the clerk may direct the time and wages books and sheets of the subcontractors, to show whether or not this stipulation has been and is being complied with.

*Provided*, That this standing order shall not be construed as prohibiting the subcontractor without the consent of the Council from purchasing or subcontracting for the supply of any materials, articles or things required for the execution of the contract which are ordinarily to be purchased wholesale in the market or of wholesale merchants or manufacturers.

249. Committees of the Council before inviting tenders are empowered in any case in which they consider it desirable to direct the insertion at the head of the schedule of rates of wages and hours of labor in the form of contract the following provision, but such provision shall not be inserted except by express direction of a committee:

The lists of wages and hours of labor in Part I and Part II of this schedule are severally to be binding on the contractor subject to the following proviso which is to be considered as included in each part of the schedule, that is to say—

*Provided, always*. That if at any time or times and so often as the same may happen during the continuance of this contract in any trade mentioned or referred to in this part of this schedule a different rate of wages or different hours of labor from the rate of wages or hours of labor respectively provided for in this part of this schedule shall after the date of this contract be agreed to between the associations of employers and the union of workmen in such trade in the district in which the work is being or is to be done then, from the date of any such agreement, and so long only and to such extent only as the same shall be in force, the rate of wages or hours so agreed upon shall be considered as substituted in this part of the schedule for the rate of wages or hours provided for in this part of this schedule for the same class of labor, and stipulations 1 and 2 in clause A of this contract shall be construed and have force and effect in all respects as if the substituted rate of wages or hours had originally been provided for in this part of this schedule instead of the rate of wages or hours therein provided for, and for this purpose any such agreement as aforesaid between the associations of employers and the union of workmen in any trade in the London district shall be considered as applying to all work done in that trade at the site mentioned in the specification in the first schedule or within the radius mentioned in Part I of this schedule.

## LONDON COUNTY COUNCIL.

London is one of the most backward as well as one of the most progressive of the urban areas in Great Britain. This is partly due to the fact that its political organization is very mixed and its conscious municipal life very recent. Its most commanding governing body is the London County Council, created in 1887 as a successor to the Metropolitan Board of Works. But the full powers usually en-



joyed by a town council are subdivided among boroughs, boards, and vestries, which, with the ancient city corporation, make it difficult to carry out any uniform policy for the entire metropolitan area.

Until recently its ownership and operation of public services has been limited to tramway undertakings, although it maintains a splendid works department and lately inaugurated a Thames steamboat service. The supply of gas is in the hands of eight private companies, operating in separate areas. Up to the present year the supply of water was also in private hands, there being eight separate companies chartered by Parliament to supply different sections of the city. Electricity supply has been treated as a borough function. The boroughs are minor political divisions, with limited jurisdiction over different areas. Up to the present time fourteen boroughs and local authorities have been endowed by Parliament with authority to carry on electric-lighting undertakings. They are Battersea, Bermondsey, Fulham, Hackney, Hammersmith, Hampstead, Islington, Poplar, Shoreditch, Southwark, Stepney, Marylebone, St. Pancras, and Woolwich. In addition to these there are at least fifteen private companies empowered by Parliament to supply current for electric light and power in various areas of the city.

The water supply of the metropolis is now in the hands of the Metropolitan Water Board, which was created by the Metropolis Water Act of 1902. The board has acquired and is administering the eight metropolitan water companies which were taken over by arbitration proceedings. The board is composed of representatives appointed by the various borough councils—the Thames and Lea Conservancies, certain county boroughs, and the London County Council. The last-named body has the largest representation.

The amount claimed by the various companies from the water board before the arbitrators was £50,939,198 (\$247,895,607). The amount awarded in cash was £30,662,323 (\$149,218,195), as well as £11,624,948 (\$56,572,809) in debentures which had to be taken over by the water board. The total cost or physical value of the various plants was not in excess of £25,000,000 (\$121,662,500).

A mixed policy has been pursued by the London County Council in the matter of tramway undertakings and transportation facilities. The bus lines on the streets are in the hands of private companies. In the last two years motor busses operated by power have been placed upon a large number of routes, but are still in an experimental stage. All of the subways are also in private hands.

Only latterly has a tramway programme been worked out by the metropolis. The total length of tramway lines in London is but 115 miles, most of which lies in the outskirts. Not all of these lines have double tracks. Of this 94 miles are owned by the council, 48 miles lying to the north of the river, and 46 miles to the south. The tracks



of the former system are leased to the North Metropolitan Tramways Company. The lease was made in 1896 for fourteen years. Under this lease the company pays the Council—

1. A fixed rent of £45,000 (\$218,993) a year on account of the lines.
2. Five per cent per annum on the purchase price of the freehold, and 6 per cent on that of leasehold, depots, and other buildings and premises.
3. Twelve and one-half per cent of the increase of gross receipts from the whole of the company's system, both within and outside the county, over those of the year ended December 31, 1895.

This was the original lease. It has been subsequently modified in a variety of ways, and in the summer of 1905 the working rights under the lease were repurchased by the Council in order that it might operate the system itself. The system will be taken over by the Council in April, 1906.

A comprehensive municipal-tramway policy has recently been worked out, which, while it will not furnish anything like all of the transportation in London, will be the framework of a system that will be susceptible of almost indefinite expansion. The plans contemplate the connection of the southern with the northern systems, the connecting link being from the Victoria Embankment to Southampton Row. This will be accomplished through the new subway recently opened under the magnificent new Kingsway which has been opened up from High Holburn to the Strand.

All of the southern lines will converge on the embankment, crossing the Thames bridges at this point. They will then pass through the subway to the north, and at the end of the Kingsway tunnel will again spread out, like the ribs of a fan, throughout north London. The method of traction is to be overhead electric, although a considerable portion of the southern system is by underground electric conduits. Thus far the Council has been checked in carrying out this scheme by the unwillingness of Parliament to permit the Thames Embankment to be used even to a limited extent for tramway purposes. Bills have been before Parliament on several occasions for this purpose, but have always been rejected.

The net capital expenditure upon the southern system up to March 31, 1905, was £2,623,693 (\$12,768,202). Of this sum £208,364 (\$1,014,003) has already been retired out of earnings.

The gross receipts for the year 1905 were £682,095 (\$3,319,415), and the working expenditure £499,826 (\$2,432,403), leaving gross profits of £182,269 (\$887,012) to be disposed of by the Council. Of this sum £136,954 (\$666,487) was used to pay interest charges, and £3,261 (\$15,870) was paid as an income tax to the Government. Thirty-five thousand pounds (\$170,328) was set aside for the renewal



of the lines, and a surplus of £7,054 (\$34,328) was carried to the appropriation account.

The southern system extends over a total length of 46<sup>7</sup>/<sub>8</sub> miles, of which 26<sup>5</sup>/<sub>8</sub> miles is double track, constructed on the underground conduit system.

The number of passengers carried during the year 1904-5 was 164,818,560, distributed as follows:

PASSENGERS CARRIED FOR EACH SPECIFIED FARE ON THE SOUTHERN SYSTEM OF THE LONDON COUNTY COUNCIL TRAMWAYS, 1904-5.

Fare.	Passengers carried.	Per cent of total.
$\frac{1}{2}$ d. (1 cent) .....	59,271,654	35.96
1d. (2 cents) .....	77,630,645	47.10
1 $\frac{1}{2}$ d. (3 cents) .....	15,036,988	9.13
2d. (4 cents) .....	8,261,892	5.01
2 $\frac{1}{2}$ d. (5 cents) .....	1,946,256	1.18
3d. (6 cents) .....	2,671,125	1.62
Total .....	164,818,560	100.00

The average fare per passenger was 0.97d. (1.97 cents).  
The advantages from the working of the system to the south of the Thames, as compared with the former operation under private company, are claimed to be:

1. A contribution to the relief of taxation from the profits of the undertaking.
2. The addition of an all-night car service.
3. The running of workingmen's cars at reduced fares.
4. Reduced fares for all passengers on many of the routes.
5. Removal of all advertisements from the windows of the cars.
6. The institution of a ten-hour day for the tramway employees.
7. The recognition of the principle of one day's rest in seven.
8. Increased wages for employees.
9. Provision of uniforms for drivers and conductors.

The cost to the Council for the increase in wages and improvement in the condition of labor has been estimated at £37,000 (\$180,061) per annum.

The saving to the passengers from the reduction of fares and the institution of half-penny (1 cent) fares has been estimated at £100,000 (\$486,650) per annum.

GLASGOW.

TRAMWAYS.

The movement for municipal ownership received a great stimulus from the opening of the Glasgow tramway system in 1894. Glasgow's tramway lines have always been the property of the city, for the tracks were constructed by the use of the city's credit under the



Tramways Act of 1870, but their actual working was leased to a private company up to 1894. The lease was for twenty-three years, and the lessee, the Glasgow Tramway and Omnibus Company, supplied the cars and operating capital. The company paid the city for the privilege an annual rental, which was fixed at an amount that was calculated to pay off the entire indebtedness of the city at the expiration of the lease.<sup>a</sup> As a matter of fact, however, additions and extensions were granted to the company from time to time, so that when the lease expired the city had expended £344,966 (\$1,678,777), while there had been cleared off by the sinking fund a total of £201,470 (\$980,454), leaving the balance of the tramway debt £143,496 (\$698,323).

During the last ten years of the lease the service, it is said, deteriorated, the cars were inadequate and in bad repair, while the attitude of the company was arrogant and indifferent to the complaints of the citizens. These conditions were still further aggravated by constant friction between the company and its employees, who, in the opinion of the city, were underpaid and overworked. The city council sought to correct these grievances when it came time to renew the franchise, which was under discussion for many years prior to its termination.

The friction over these questions stimulated a demand for the municipal operation of the system. In the local elections of 1890 and 1891 this was a test question with the candidates for the council. Following the election of the latter years, the city council decided to take advantage of the parliamentary powers conferred upon it by the act of 1870, and passed a resolution to take over the operation of the tramways upon the expiration of the lease in 1894. Negotiations were then opened for the purchase of the cars, horses, and equipment of the company, but as the latter insisted on the privilege of running a competing omnibus line, the negotiations were finally abandoned, and the city proceeded to purchase its own equipment, leaving the company in possession of its horses and cars, but without the privilege of operating them. The lines were opened by the city July 1, 1894, as a horse-car system, with 31 $\frac{3}{8}$  miles of double-track and five-

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<sup>a</sup> The terms of the lease to the private company were as follows:

1. That the company paid the recouping interest on money borrowed for making the lines, including the parliamentary expenses.
2. That 3 per cent on this total expenditure be paid to the corporation [city] to be set aside for paying off the debt.
3. That 4 per cent on the cost of constructing the lines be lodged with the corporation for meeting renewals to be executed by the company under supervision of the corporation.
4. That £150 (\$730) per mile be paid for the use of the streets; and
5. That all other expenses incurred by the corporation in connection with the tramways be paid by the company.



eights mile of single-track road. At the same time the private company inaugurated a competing omnibus line over all of the tramway route. This omnibus line was continued for only a few months, when it was withdrawn from service.

The city signalized the opening of the undertaking by a general reduction of fares, amounting in many cases to 33 per cent. It introduced half-penny (1-cent) fares for half-mile distances and considerably extended the penny (2-cent) rides. During the first fiscal year 39 per cent of the passengers carried paid but 1-cent fares. The lowest fares charged by the private company had been 1 penny (2 cents).

As in all English and most continental cities, the fares are graded by the distances traveled. Instead of a straight fare for any distance, charges are fixed by zones and determined by the distance traveled.

The following is a comparison of fares and average length of possible ride under municipal ownership in 1905 and those which prevailed prior to 1894 under the private company:

AVERAGE LENGTH OF POSSIBLE RIDE FOR EACH SPECIFIED FARE IN GLASGOW UNDER PRIVATE COMPANY, 1894, AND UNDER MUNICIPAL MANAGEMENT, 1905.

Fare.	Private company operation (miles).	Municipal operation (miles).
$\frac{1}{2}$ d. (1 cent) -----		0.58
1d. (2 cents) -----	1.12	2.30
$1\frac{1}{2}$ d. (3 cents) -----	1.80	3.48
2d. (4 cents) -----	2.20	4.59
$2\frac{1}{2}$ d. (5 cents) -----		5.88
3d. (6 cents) -----	3.23	6.90
$3\frac{1}{2}$ d. (7 cents) -----		8.11
4d. (8 cents) -----		9.19
$4\frac{1}{2}$ d. (9 cents) -----		10.15
5d. (10 cents) -----		10.77
$5\frac{1}{2}$ d. (11 cents) -----		11.59

The city also increased the operating cost by a reduction of the hours from 12 to 10 a day. It subsequently (August, 1901) made a still further reduction in the case of conductors, motormen, and other traffic employees to 9 hours a day, or 54 hours a week. In addition to this, the employees are uniformed at the expense of the city and are given a certain number of days as holidays on pay. All advertisements are excluded from the cars.

The added expense incident to the better treatment of the men alone has involved a present current burden to the revenues of the plant in excess of \$500,000 a year, distributed as follows:



## INCREASE IN OPERATING COST OF TRAMWAYS DUE TO BETTER TREATMENT OF EMPLOYEES.

Holidays given on pay -----	\$14, 400
Spare men -----	24, 000
Free uniforms -----	30, 240
Wage increases -----	158, 400
Reduction in hours -----	288, 000
Total -----	515, 040

The total capital outlay by the city on May 31, 1895, after eleven months of operation of the system, was £552,956 (\$2,690,960). Despite the unusual burdens incident to the change to public management, the first year's operation showed sufficient earnings to permit £18,645 (\$90,736) to be expended on maintenance and replacement; £9,194 (\$44,743) to be written off from the capital account as depreciation; £6,750 (\$32,849) to be placed in a permanent way renewal or reserve fund, and £8,260 (\$40,197) to be paid to the "Common Good," which is a special fund, like a general revenue fund. The total net earnings (that is, gross earnings less operating expenses) were thus, £42,849 (\$208,525). The opening of municipal operation, according to a statement of Mr. Dalrymple, the present tramway manager, "was coincident with—many people would say it was the cause of—the renaissance of civic enthusiasm that has characterized the last ten years of the life of the second city of the United Kingdom."

From the start the administration of the tramways has been enterprising and progressive. The comfort and convenience of the public has been a matter of constant concern, as has the well-being of the employees. At the same time the financial accounts have been kept on a most conservative basis.

Owing to the inability of the city to acquire possession of the tracks prior to the termination of the lease of the private company, the undertaking was opened in 1894 as a horse-car system. Steps were immediately taken to electrically equip the lines. Experts and commissioners were sent to the Continent and to America to make a study of the most recent electric developments. The overhead electric system was decided on, and by 1901 the reequipping of the system was complete. The weight of the rails used has steadily increased until to-day 100-pound rails are used. They are all of the girder-groove pattern and are laid in a 6-inch bed of Portland cement, which extends 18 inches beyond the outer rails.

It is of interest to note that the operation of the system was so profitable that the city was able to wipe the entire capital cost of the horse-car system off its books by allowances for depreciation during the first eight years of management. Thus when the electric system



was opened in 1901 it was wholly free from any burden from the old and abandoned horse-car system.

The system has been rapidly extended to new streets as well as to the areas lying without the city. Many of the surrounding suburbs have been reached and large residential areas have been opened up to settlement. In eleven years' time the system has increased from 63 to 147½ miles of single track. At the same time the car mileage has been more than trebled and the service rendered most responsive to the needs of the community by new cars and more frequent service.

The effect of studying the public needs was immediately manifest in the revenues. The reduction of fares and the improvement in service greatly stimulated traffic. In the first four years, with an increase in track mileage of but 14.06 per cent, the number of passengers carried nearly doubled, while the gross earnings increased £167,095 (\$813,168). This was prior to the introduction of electric traction. Within the eleven years of operation the passengers carried have increased from 57,104,647 for eleven months in 1895 to 195,767,519 for the year ending May 31, 1905.

At the present time there are 683 cars in stock. Of these something less than one-half are double-deck covered cars, although all types of cars have seating accommodations on the tops.

The most scrupulous care is manifested in regard to the cleanliness of the cars. Every night they are cleaned and disinfected. Every six weeks they are brought into the works for a thorough overhauling, while every year the cars are painted and put in a state of original efficiency.

A car shop has been constructed in connection with the department. Here the equipment is repaired and painted, and here the city erects all of its cars by direct labor.

The tramway department has maintained the rates of fare substantially as originally established by the council, although the distance that can be traveled for 1 penny (2 cents) has been considerably extended. This policy has resulted in a splendid balance sheet, while the rates of fare are as low as and possibly lower than in any other city in the United Kingdom.

In 1905 29.90 per cent of the passengers carried paid but a half-penny (1 cent), while 60.22 per cent paid but 1 penny (2 cents). Of the total number of passengers, 9.88 per cent paid no more than 1 penny (2 cents) a ride.

The number of passengers carried and the receipts under each rate of fare for the fiscal year 1905 were as follows:.



## PASSENGERS CARRIED AND TRAFFIC RECEIPTS FOR EACH SPECIFIED RATE OF FARE ON GLASGOW TRAMWAYS FOR THE YEAR ENDING MAY 31, 1905.

Fare.	Passengers carried.		Traffic receipts.	
	Number.	Per cent.	Total.	Per cent.
1d. (1 cent) .....	58,540,026	29.90	\$593,509	16.12
1d. (2 cents) .....	117,897,392	60.22	2,390,615	64.94
1½d. (3 cents) .....	13,100,122	6.69	398,449	10.82
2d. (4 cents) .....	3,648,196	1.87	147,951	4.02
2½d. (5 cents) .....	1,024,047	.52	51,911	1.41
3d. (6 cents) and upward .....	1,557,736	.80	98,853	2.69
Sundries .....			122	
Total .....	195,767,519	100.00	3,681,410	100.00

The report of the operation of the tramways for 1905 shows that the average fare paid by all passengers carried was 0.93d. (1.89 cents), and that the average number of trips taken per capita of population was 195.77. The working cost (not including power works costs) to the city for each of the passengers so carried was 0.44d. (0.89 cent). At the same time the average fare charged per passenger per mile was but 0.46d. (0.93 cent).

The financial policy of the Glasgow tramways has been very cautious. While many English cities apply surplus earnings to the relief of local taxation, Glasgow has to a large extent made use of its excess earnings to improve the service, increase the length of carriage, extend the system, or retire the bonded indebtedness. An exception has been made in favor of the "Common Good." This is a general fund, known only in Scottish cities, which is the repository of the general trust and special funds of the city, and hence operating indirectly to the relief of taxation. Annual appropriations from surplus have been made to this fund, which aggregate a total of £156,760 (\$762,873) in eleven years' time. In addition to this the tramways have paid a total of £157,636 (\$767,136), in local taxes during the same period, or an average of £14,331 (\$69,742) a year. All public undertakings pay local taxes the same as though they were in the hands of private companies. This is true of the gas, water, electricity, tramways, markets, and telephone, as well as all other undertakings maintained by local authorities. Public and private enterprises, therefore, are upon the same basis in this respect.

All acts of Parliament empowering a city to operate an undertaking provide for an annual repayment to liquidate the debt in a limited period. This period is usually thirty years. The object is to prevent the creation of a perpetual local debt. As a matter of fact, Glasgow has done much better than this. The cost of the entire horse-car system has been written off the books, while at the present rate of debt repayment the plant will be owned by the city entirely free from debt within a comparatively few years.

The financial status of the system at the end of the fiscal year 1905 may be summarized as follows: Assets of the tramway, £3,075,168



(\$14,965,305); funded and floating indebtedness, £1,815,666 (\$8,835,939), leaving a net amount entirely paid out of earnings in eleven years of £1,259,502 (\$6,129,366). To this net amount there should be added the sum of £156,760 (\$762,873) paid into the "Common Good" fund, as well as £157,636 (\$767,136) paid in taxes to the city, adjacent boroughs, and the school and poor authorities.

The revenue account for the fiscal year ending May 31, 1905, was as follows:

Total revenue	\$3, 721, 854. 59
Working expenses (including maintenance and local taxes, but not including depreciation)	1, 884, 150. 44
Net revenue in excess of working expenses	1, 837, 704. 15
Interest on surplus revenue	15, 150. 63
Total net earnings	1, 852, 854. 78

The net earnings were disposed of as follows:

Interest on capital	\$242, 868. 66
Sinking fund	228, 333. 44
Income tax to Government	26, 445. 39
Rental of suburban lines	24, 724. 07
Rental of suburban lines	4, 453. 17
Depreciation	394, 744. 53
Permanent way renewals fund	351, 249. 33
Parliamentary expenses	4, 335. 69
Payment to "Common Good" fund	121, 662. 50
Special depreciation	333, 355. 25
General reserve fund	120, 682. 75

From this it appears that the operating expenses for the year were 50.62 per cent of the total receipts. This includes full charges for maintenance; for it is the policy of the department to maintain the system at its original efficiency as nearly as possible. The maintenance allowance for the year amounted to £68,640 0s. 7d. (\$334,036.70). Included in the operating expenses is also a charge of £38,781 15s. 9d. (\$188,731.57) for local rates or taxes.

If we deduct from the total net earnings the amount paid as interest on capital, rental of other lines, income tax, and parliamentary expenses, the net earnings for the year were £318,509 15s. 5d. (\$1,550,027.80). And if to this were added the saving to the 195,767,519 passengers carried during the year from the average reduction of fare from the amount formerly paid the private company to the average of 0.93d. (1.89 cents) paid the city, there would be a still further increase in saving to the community of £193,356 (\$940,967) more per annum or a total annual saving to the city of £511,866 (\$2,490,996). (<sup>a</sup>)

<sup>a</sup> Commenting on the annual report of the Glasgow tramways for 1905, the Municipal Journal of August 11, 1905, says:

"Last year the average fare charged per mile on the Glasgow corporation's



An analysis of the expenditure account for operation during the fiscal year 1905 shows the following distribution:

TOTAL WORKING EXPENSES OF EACH CLASS AND AVERAGE PER CAR MILE  
IN GLASGOW, YEAR ENDING MAY 31, 1905.

Class of expenses.	Total.	Average per car mile.
Traffic expenses (including wages, etc.).....	\$1,060,278.94	\$9.0590
General expenses.....	365,538.09	.0205
General repairs and maintenance.....	334,036.70	.0186
Power expenses.....	124,266.71	.0069
Total amount of working expenses.....	1,884,150.44	.1050

Of the traffic expenses £157,585 11s. 1d. (\$766,890.10) was paid in wages to motormen and conductors, and £10,573 4s. 4d. (\$51,454.56) to other traffic employees, or a total of £168,158 15s. 5d. (\$818,344.66) in wages, or 2.25d. (4.57 cents) per mile.

The general repair and maintenance account is also a substantial item of £68,640 0s. 7d. (\$334,036.70). The maintenance account is still further supplemented out of gross profits by the sum of £153,291 13s. 2d. (\$745,993.86) put into a depreciation and permanent way renewal fund, by £68,500 (\$333,355.25) put into a special deprecia-

tramways system was 0.46d. [0.93 cent]—less than a half-penny; when the lines were leased to a company the figure was 0.89d. [1.80 cents]—more than 3 farthings. If this were the only fact we extracted from the report of the undertaking just issued, it would be a sufficient justification of municipalization, which we are always content to judge from the standpoint of public advantage. A local authority that carries passengers on its tramways for nearly a half-penny a mile less than a company was able to carry them justifies itself and the system of which its undertaking is a practical exponent.

“Sixty per cent of the passengers were carried at penny [2-cent] fares, nearly 30 per cent at half-penny [1-cent] fares, and nearly 7 per cent at 3-half-penny [1½-cent]. This accounts for nearly 97 per cent, which does not leave much margin for the higher priced fares.

“When we come to the financial results of this public-advantage tramways undertaking, we begin to see things. We begin to see that it is possible to be overcautious, and that even the admirable results already described could be beaten were the corporation less apprehensive that during one fine night the tramways undertaking may be spirited away, and that it may be necessary to commence tramway building all over again.

“The difficulty of the situation is that the corporation has a little balance of nearly £381,000 [\$1,854,137] to play with.

“With this nice little nest-egg the tramways committee proceeds to insure the absence of the broker's men. First, £96,825 13s. 4d. [\$471,202.11] is set aside for interest on capital and sinking fund. Then follows other routine expenditure, closely accompanied by a little contribution of £81,114 13s. 4d. [\$394,744.53] to depreciation, and another of £72,176 19s. 10d. [\$351,249.33] toward the permanent way renewals fund. Thus, including sinking fund, we have three considerable depreciation provisions already. ‘Common Good’ gets £25,000 [\$121,662.50], and still there remains a balance of £93,298 13s. 6d. [\$454,038].

“We can imagine the perplexity of the members of the tramways committee



tion fund, and £24,798 13s. 6d. (\$120,682.75) put into a general reserve fund. This very substantial provision for depreciation, which is in addition to £46,919 8s. 9d. (\$228,333.44) added to the sinking fund, is a refutation, so far as Glasgow is concerned, of the claims frequently urged that the low fares and large profits of British undertakings are at the cost of the plant.

As a matter of fact, the total sums set aside to date for these purposes, according to the reports of the tramway department, are as follows:

Depreciation and permanent way renewals fund	\$3, 784, 370. 14
General reserve fund	158, 598. 14
Sinking fund	2, 186, 395. 61
Total	6, 129, 363. 89

The average traffic revenue per car mile for the year was 10.23d. (20.75 cents); the average number of car miles per car per day was 109.59, and the average speed per hour was 7.4 miles. The maximum rate of speed allowed is 16 miles per hour.

The financial showing of the tramway department is the one most easily portrayed. But it does not disclose either the motive of municipalization or the attitude of the public toward the undertaking. That a business enterprise should not be undertaken that will not

when their calculations showed them a balance of nearly £100,000 [\$486,650], after paying off everything. We can imagine the inspiration that came to one of them to begin the thing all over again, which was actually done. The balance was disposed of by applying £68,500 [\$333,355.25] to special depreciation, and £24,798 13s. 6d. [\$120,682.75], to the general reserve fund, a total of £93,298 13s. 6d. [\$454,038]. Thus Glasgow has made five depreciation provisions in its tramways account this year.

"We think an apology is needed for this excessive Scottish caution, and the committee almost gives one.

"The account stands thus:

Capital unpaid	£1, 783, 083 13s. 7d.	[\$8, 677, 376. 72]
Depreciation and renewals	£777, 636 18s. 8d.	[\$3, 784, 370. 14]
General reserve	£32, 589 15s. 6d.	[\$158, 598. 14]

"Every year the first item goes down and the second and third leap up. At the rate things are going, the second and third will probably equal the original capital expenditure by the time the first is down to nothing. That might be merely cautious policy if there were any likelihood, as we have suggested, of the concern evaporating some fine summer's night. But there isn't, and the business is only ten years old. When the loans are paid off, the undertaking, which will not disappear with the debt, will still exist, and there will be sufficient money at the bank to start another of the same size.

"Our only questions to the Glasgow corporation are:

"Why should not the average fare per mile be still further reduced?

"Will it really be necessary to start another Glasgow tramways undertaking when the loans for the present one are paid off?

"The Glasgow tramways pay rates, which, like everybody's, are increasing. The amount paid ten years ago was £2,485 [\$12,093]; last year it was £38,316 [\$186,465]."



support itself is an elementary maxim to the Glasgow town council. That once assumed it should be managed for service rather than to reduce taxation is equally accepted. The original motive and the present attitude is rather a feeling that the tramways are a part of the city, like the sewers, the streets, the parks, and the town hall. They are so essential to its well-being that their control constitutes a natural city function differing in no respect from the others. But the main idea as gleaned from many people is that the tramways are a natural monopoly, and one which can only be properly managed by the city as a part of the city's functional life. In the carrying out of this policy the controlling idea has been to make the enterprise serve the public in the largest possible way. The cars are of a substantial and comfortable sort. They are built with double decks—that is, with seats on top as well as within. Cars are run so frequently as to insure seating accommodations at almost any hour. The tracks are laid flush with the pavement, and the rails are grooved so as not to interfere with other traffic. The health of the community is protected by daily cleaning and disinfection of the cars, and all advertisements are excluded. In eleven years' time the mileage has been nearly trebled and extended far into the suburbs in order to open up new building areas. Every precaution is taken for the prevention of accidents, by guards and fenders, while the employees are trained in ambulance and other "first aid to the injured" work. The conductors are courteous and considerate, and are carefully trained to their work.

During eleven years of the municipal operation of the tramways there has been no friction between the department and its employees, who now number 4,352. On the taking over of the system by the city in 1894 the hours of daily labor of traffic employees were reduced from 12 to 10, while a still further reduction to 54 hours per week of 6 days was later made. In this, as in the other departments, the policy is to pay a fair rate of wages and to grant considerate treatment to the employees. By such means the employees are attached to the service and efficient men are secured for the department.

Along with the reduction in hours a 25 per cent increase of wages was made. At the present time conductors and motormen receive 24s. (\$5.84) per week when they enter the service, while a premium is placed on permanency by a gradual increase in wages to a maximum of 31s. (\$7.54) per week, dependent upon the length of time of employment. Free uniforms are also supplied to the men. In case of a dispute as to details of employment in artisan work, the department endeavors to accept the standard of wages fixed by the labor unions in similar employment. All attempts to unionize the car employees have been unsuccessful. Mr. Dalrymple, the manager of



the department, says: "The city is the best union the men can have." But the policy of the city is to leave the men perfectly free in such matters.

Entrance to the service is by competitive rules fixed by the department, for the civil service of English cities is not regulated by act of Parliament. Employees on entrance have to pass a severe medical examination as well as an educational test in the minor branches. Thereafter they are given a trial as motormen in the so-called motor school. If they fail to acquire sufficient proficiency in this branch, they can not enter the service.

A friendly society has been organized among the men which is purely voluntary. Three-fourths of the employees are members. They pay 6d. (12 cents) per week from their wages, while the department contributes 3d. (6 cents) per week to the same fund. In case of sickness, free medical attendance is supplied by the society, and upon a physician's certificate the society pays him 15s. (\$3.65) per week for the first six months, 10s. (\$2.43) per week for the next six months, and 5s. (\$1.22) per week for the second year. The department also contributes to the infirmaries and a convalescent home in the city, where free hospital treatment is secured to the men.

Out of the revenues of this friendly society a pension fund is being accumulated for those who have been in the service a specified number of years.

Five days holiday with full pay are allowed the men each year, and premiums in the form of increased wages are given those motormen whose records are free from accidents for six months' time.

The comfort and health of the men are promoted by recreation rooms located at car stations, where kitchen appliances for preparation of meals are provided, as well as a gymnasium, baths, and opportunities for recreation.

Many athletic clubs have been organized, while more recently instruction in "first aid to the injured" has been given to the men, and an ambulance corps organized, by which the employees themselves are able to take care of injured persons. In each car ambulance appliances are provided for this purpose.

In the entire history of the department there has been no instance of organization on the part of the employees to control the policy of the city. Such a thing as putting pressure upon councilmen or managers is unknown, although such control has been suggested as a possible danger of public ownership. The department meets its employees on a generous basis; grievances are immediately disposed of by the manager or taken up by the committee on tramways, and thus far no friction has arisen over such an issue.

The disbursement for wages for motormen, conductors, and other traffic employees during the fiscal year 1905 was £168,159 (\$818,346).



### WATER SUPPLY.

The water supply of Glasgow was the first of the services taken over by the city. This was done in 1855 under powers from Parliament. At that time water was supplied by a private company, obtained from the river Clyde, and was so impure as to be a constant menace to the health of the community.

This department now maintains four separate systems. By far the largest is that of Loch Katrine,  $34\frac{1}{2}$  miles from the city. The supply is almost inexhaustible and is perfectly pure, as the watersheds surrounding the loch, which is in the heart of the Highland regions, have been acquired by the city. The possible supply from this source is 110,000,000 gallons per day, the water being delivered through two large aqueducts. Some distance from the city two immense reservoirs have been built, from which point the water is conveyed to the city for distribution. No pumping machinery is required, as the water is delivered into the distributing mains by gravity pressure. A portion of the city is supplied from the Corbals Works, but as this water contains impurities it is filtered by means of sand filtration before being used.

A unique feature of the water department is the hydraulic works situated in the city. These were erected for the purpose of supplying high water pressure for power purposes in working hoists, elevators, hydraulic presses, and other machinery. About 25 miles of special pipes have been laid in the business section of the city, and at the close of the fiscal year 1905 the total cost of the plant, less amount written off for depreciation, was £126,333 (\$614,800).

The population supplied in the city and surrounding territory is about 1,075,000. The daily consumption is equal to  $56\frac{1}{2}$  gallons per head, of which 34 gallons are for domestic purposes and  $22\frac{1}{2}$  gallons for trade and public uses. This is less than half the per capita consumption of water in the average American city.

The department is maintained by public taxation to the extent of 1 penny in the pound of the rental value of real property (equivalent to about 0.02 per cent of the capital value), payable by all owners of real property within the municipality. In addition to this a domestic rate of 5d. in the pound of rental value is levied upon the tenant for domestic uses. The rate has been gradually reduced from 1s. 2d. in 1856, and under American conditions is equivalent to a charge of about \$2 on every \$100 of annual rental value of a dwelling.

No attempt has been made to introduce meters for all users, although over one-third of the revenue is derived from the metered consumers. The present rate is 4d. (8 cents) per thousand gallons, with a minimum charge of \$8.60 per annum.



All charitable institutions are supplied free of charge, as are the public baths and wash houses, the street-cleaning department, and the fire and police departments.

The total capital cost of the plant to date is £4,039,985 (\$19,660,587), against which there is held by the corporation a sinking fund which, together with the debt redeemed out of this fund since the commencement of the undertaking, amounts to £1,320,407 (\$6,425,761). The net indebtedness of the plant is therefore £2,719,578 (\$13,234,826).

In 1905 the total revenue from all sources was £249,255 (\$1,212,999), and the expenditure, not including interest charges, was £92,283 (\$449,095), leaving a net revenue of £156,972 (\$763,904). The interest charges for the year were £98,481 (\$479,258), leaving as net revenue over all the sum of £58,491 (\$284,646).

### GAS SUPPLY.

The manufacture and supply of gas has been in the hands of the city of Glasgow since 1869, when it was acquired from two private companies operating within the city. The price paid for the plants was about two and a half million dollars and the gross revenues the first year of operation were £235,701 (\$1,147,039). The average price received for gas was 4s. 3.6d. (\$1.05), about the average in the large cities of America to-day. From time to time the charge for gas has been reduced. With every reduction in price the consumption of gas has increased sufficiently to more than compensate for the reduction. Thus between 1886 and 1891 the price was reduced from 3s. 3d. (79 cents) to 2s. 6d. (61 cents), while the gross revenues increased from £401,307 (\$1,952,961) to £483,577 (\$2,353,327). From this time on the increase in use was most rapid. While the immediate effect of a reduction in price was a falling off in profits, this loss was regained within two or three years. Thus in the fiscal year 1896-97 the rate was reduced to 2s. 2d. (53 cents) per thousand cubic feet and the gross profits (gross income less operating expenses) fell from £132,949 (\$646,996) in 1895-96 to £101,939 (\$496,086) in 1896-97, a decrease of £31,010 (\$150,910). By 1905 they had risen to £147,571 (\$718,154), even in the face of a still further reduction in price.

During the year ending May 31, 1905, the rate was 2s. 1d. (51 cents) per 1,000 cubic feet for private lighting and 2s. (49 cents) for power purposes.

The undertaking receives no aid from taxation nor does it aid the taxpayer, for it is the policy of Glasgow in all of its departments to reduce charges, improve the service, and use the surplus earnings for the retirement of the debt. Thus the total capital expenditure account to date is £3,764,342 (\$18,319,170), although the present indebtedness on account of it is but £1,919,285 (\$9,340,200), showing a



surplus of expenditure on capital account over liabilities of £1,845,057 (\$8,978,970).

The gross revenue of the plant for 1905 was £800,177 (\$3,894,061), the operating cost, £652,606 (\$3,175,907), and the gross profit to be used for interest, depreciation, and sinking fund was £147,571 (\$718,154).

The operating expenditures of the gas department for the fiscal year 1905 were as follows:

Manufacture of gas	\$2, 550, 995
Distribution of gas	319, 690
Stove account	36, 333
Taxes and rents	197, 960
Management	63, 605
Law and allowance	7, 324
Total operating expenditures	3, 175, 907
Amount written off as depreciation	176, 167
Total	3, 352, 074

One person in five, or practically the entire population, is served with gas, while the most progressive policy of lighting has been adopted, the number of street lamps being 26,143.

The cost of coal in 1905 was 10s. 3d. (\$2.49) per ton, from which 9,481 cubic feet of gas was realized, or 19s. 9d. (\$4.81) worth of gas. The value of the by-products realized was £186,479 (\$907,500), and the candlepower maintained was 20.

As in other British cities, it has been the aim of the gas department to stimulate use as much as possible and to reduce rates in aid of industry. With this in view, a special reduction to 1s. 9d. (43 cents) for power purposes was made in 1905. Over 1,800 gas engines are in use in the city, thus materially reducing the smoke evil, while gas stoves are nearly universal.

### ELECTRICITY SUPPLY.

The electricity department of the city of Glasgow is one of the largest in the United Kingdom. It is also one of the oldest and most successful. As in all the other departments of the city, the published reports are very exhaustive. For these reasons, but especially because of the fact that the plant has been established for a sufficient length of time to make a proper showing, its report is of special value.

Further than this, although the plant was purchased from a private company, the price paid was not exorbitant. While many cities paid hundreds of thousands of pounds for franchises and issued their bonds therefor, Glasgow obtained possession of its first plant for £15,000 (\$72,998). This was in 1892. In 1899 another private company was bought out at a cost of £37,000 (\$180,061),



but even in this instance the payment for the franchise did not exceed \$50,000.

Since the original purchase the plant has grown by leaps and bounds. The total capital expenditure, less depreciation, has increased to £1,244,162 12s. 10d. (\$6,054,717.50). The gross revenue has grown in twelve years from £7,784 5s. 4d. (\$37,882.13) to £186,371 13s. 11d. (\$906,977.86), and the total units sold to private and public consumers from 287,712 to 18,248,468. The number of consumers is now 11,643, and the number of public lamps 825. The city pays for the latter at the rate of £14 (\$68.13) each per annum.

This department has four separate generating stations located in different sections of the city, and is constantly increasing its mileage of wire in order to take on new consumers. It is the policy, growing out of the permanency of the venture and the desire to promote the public convenience, to extend the use as fully as possible. Unhampered by a terminable franchise, it is able to build for the future; to anticipate growth in its stations and wiring, and to thus reduce the cost of replacement and depreciation, which is a heavy burden on private capital.

For the year 1905 the gross profits of the undertaking in excess of working cost were £111,774 16s. 10d. (\$543,952.27). Of this sum, £41,840 17s. 3d. (\$203,618.56) was charged to depreciation and written off the capital cost of the plant. Of the balance, £38,182 7s. 11d. (\$185,814.63) was used to pay interest on the loans of the undertaking, £15,475 (\$75,309.09) was put into the sinking fund to redeem the indebtedness, £3,553 19s. (\$17,295.30) was applied to debit of profit and loss account brought forward from preceding year, and the balance, £12,722 12s. 8d. (\$61,914.69), was placed in its reserve fund.

The working cost per kilowatt hour in 1905 was 0.829d. (1.68 cents), and the average charge per kilowatt hour to users was 3.006d. (6.092 cents) for private lighting, 1.865d. (3.783 cents) for public lighting, and 1.258d. (2.554 cents) for power. The average price received for all purposes was 2.51d. (5.094 cents) per kilowatt hour.

The growth of the electricity department, the increase in the number of consumers and revenue, and the constant reduction in charges is evidenced by the following tables:



## ELECTRICITY GENERATED AND SOLD BY THE GLASGOW ELECTRICITY DEPARTMENT, AND NUMBER OF CONSUMERS, 1893 to 1905.

[A Board of Trade unit is equal to 1 kilowatt hour.]

Year ending May 31—	Total quantity generated (B. T. units).	Quantity sold (B. T. units).				Quantity used on works (B. T. units).	Total quantity accounted for (B. T. units).
		Private con- sumers.	Public lamps.	By con- tract.	Total.		
1893.....	408,529	262,218	25,494	None.	287,712	13,975	301,687
1894.....	854,766	543,178	159,070	None.	702,248	13,326	715,574
1895.....	1,022,730	714,362	186,925	None.	901,287	20,828	922,115
1896.....	1,279,687	886,606	204,353	None.	1,090,959	23,898	1,114,857
1897.....	1,729,483	1,287,418	210,424	None.	1,497,842	35,727	1,533,569
1898.....	2,619,019	1,885,902	228,134	None.	2,114,036	55,276	2,169,312
1899.....	3,401,731	2,566,016	258,334	None.	2,824,350	67,435	2,891,785
1900.....	5,226,818	3,788,795	461,874	None.	4,250,669	155,294	4,405,963
1901.....	8,254,146	6,290,819	523,172	None.	6,813,991	626,151	7,440,142
1902.....	11,122,606	8,384,696	884,839	12,508	9,282,043	829,713	10,111,756
1903.....	13,197,612	10,419,488	1,064,404	17,432	11,501,324	745,801	12,247,125
1904.....	17,770,488	13,604,119	1,460,780	42,766	15,107,665	978,393	16,086,058
1905.....	21,584,088	16,642,253	1,525,505	80,710	18,248,468	1,025,516	19,273,984

Year ending May 31—	Quantity lost in distri- bution or otherwise not accounted for.		Number of consumers.	Number of public lamps.	Total maximum supply demanded.	
	B. T. units	Per cent.			Kilowatts.	Equivalent in 8 c. p. lamps.
1893.....	106,842	26.15	108	71	790	24,687
1894.....	139,192	16.28	378	102	1,684	52,625
1895.....	100,615	9.84	586	103	2,090	65,312
1896.....	164,830	12.88	855	112	2,638	82,438
1897.....	195,914	11.33	1,090	112	3,366	105,188
1898.....	449,707	17.17	1,437	119	4,800	150,000
1899.....	509,946	14.99	1,858	227	6,114	191,052
1900.....	820,855	15.71	2,852	265	7,732	241,625
1901.....	814,004	9.86	4,031	348	11,787	368,342
1902.....	1,010,850	9.09	5,374	500	15,722	491,306
1903.....	950,487	7.20	7,013	719	20,183	630,708
1904.....	1,684,430	9.48	9,324	814	25,762	805,058
1905.....	2,310,104	10.70	11,643	825	31,399	931,230

## CAPITAL, REVENUE, AND PROFIT AND LOSS ACCOUNTS OF THE GLASGOW ELECTRICITY DEPARTMENT, 1893 TO 1905.

Year ending May 31—	Capital account at end of year.			Revenue account for the year.			
	Expendi- ture, less depreci- ation.	Liabilities.		Gross rev- enue.	Gross ex- penditure.	Gross profits.	Deprecia- tion writ- ten off.
		Corpora- tion loans.	Loans re- deemed out of sink- ing fund.				
1893.....	\$470,576	\$389,320	-----	\$37,882	\$26,358	\$11,524	\$6,466
1894.....	567,363	583,980	-----	87,675	46,679	40,996	21,379
1895.....	641,233	647,245	\$9,733	103,153	58,336	44,817	25,071
1896.....	642,191	630,431	16,546	125,859	56,402	69,457	30,802
1897.....	689,345	713,429	16,546	148,305	60,713	87,592	52,098
1898.....	914,933	747,981	30,659	176,949	91,928	85,021	43,531
1899.....	1,653,551	1,567,013	38,932	214,813	116,860	97,953	36,601
1900.....	2,970,925	3,058,595	55,965	290,832	170,326	120,506	15,483
1901.....	4,069,107	4,173,674	133,179	386,642	247,008	139,634	-----
1902.....	4,685,111	4,770,296	178,934	505,826	265,346	240,480	55,628
1903.....	5,069,655	5,048,054	241,831	618,066	285,507	332,559	180,963
1904.....	5,445,846	5,273,428	323,047	769,833	313,594	456,239	156,607
1905.....	6,054,717	5,870,615	407,170	906,978	363,026	543,952	203,618



## CAPITAL, REVENUE, AND PROFIT AND LOSS ACCOUNTS OF THE GLASGOW ELECTRICITY DEPARTMENT, 1893 TO 1905—Concluded.

Year ending May 31—	Profit and loss account for the year.						Average price of electricity per kilo- watt hour.
	Carried to profit and loss.	Interest on loans, etc.	Trans- ferred to sinking fund.	Trans- ferred to reserve fund.	Trans- ferred from re- serve fund.	Balance.	
1893-----	\$5,058	\$9,796	\$3,893	-----	-----	<i>a</i> \$8,631	\$0.1419
1894-----	19,617	16,733	5,840	-----	-----	<i>a</i> 2,956	.1419
1895-----	19,746	20,606	6,472	-----	-----	<i>a</i> 7,332	.1217
1896-----	38,655	20,664	6,404	-----	-----	<i>b</i> 11,587	.1217
1897-----	35,494	20,928	7,134	-----	-----	<i>b</i> 7,432	.1032
1898-----	41,490	23,428	7,480	\$10,582	-----	-----	.0884
1899-----	61,352	36,235	15,670	9,447	-----	-----	.0789
1900-----	105,023	74,244	30,586	193	-----	-----	.0712
1901-----	139,634	119,459	42,158	-----	\$21,983	-----	.0577
1902-----	184,852	143,156	41,696	-----	-----	-----	.0564
1903-----	151,596	161,935	57,282	-----	-----	<i>a</i> 67,621	.0556
1904-----	299,632	175,308	73,998	-----	-----	<i>b</i> 50,326	.0526
1905-----	340,334	185,815	75,309	61,915	-----	<i>b</i> 17,295	.0510

*a* Deficit.*b* Surplus.

## TELEPHONE SERVICE.

The corporation of Glasgow was the first and is thus far the only large city in Great Britain to take over the telephone service. The city was served by the National Telephone Company, which enjoys a parliamentary grant for the entire United Kingdom. Inefficient service and high charges led to an organized movement for the installation of an independent and competing system. Application was made to Parliament as early as 1893 for permission to establish and maintain a system, but for several years this was denied on the ground that it was not a service of universal use or of universal necessity. Finally, by an act in 1899 the city was authorized to erect its own system. A complete and up-to-date installation was made, all the wires in the city being laid in conduits underground. This system was opened for service in April, 1901.

At that time the private company charged £10 (\$48.67) per annum for unlimited service with rates as high as \$120 in the outskirts of the city. The city immediately reduced rates to £5 5s. (\$25.55) per annum for unlimited service, £3 10s. (\$17.03) for toll service, £4 4s. (\$20.44) for a two-party line, and £3 3s. (\$15.33) for a four-party line. The National Company met this reduction with a variety of services cheaper than they had previously offered, and a lively competition for subscribers ensued, a service as cheap as \$6 per annum being now offered by the private company on a twenty-party line. At the present time the area supplied by the public enterprise is approximately 143 square miles.

The capital cost of the entire municipal system to May 31, 1904, was £320,783 (\$1,561,090). Against this there had been set aside in a sinking fund £16,110 (\$78,399). There had also been written



off as depreciation a considerable sum. The average capital cost per station up to May 31, 1904, was £28 2s. 6 $\frac{3}{4}$ d. (\$136.89).

The earnings for the fiscal year ending May 31, 1905, were £55,426 8s. 9 $\frac{1}{2}$ d. (\$269,732.77), while the operating expenditures, including post-office royalty £5,538 15s. 5d. (\$26,954.43) and terminal fees £673 18s. 4d. (\$3,279.62), were £34,680 8s. 3d. (\$168,772.23), leaving a gross profit of £20,746 0s. 6 $\frac{1}{2}$ d. (\$100,960.54). The interest charge was £9,188 7s. 11d. (\$44,715.33) and the sinking fund payment £10,053 6s. 8d. (\$48,924.55), leaving a surplus on the year's operations of £1,504 5s. 11 $\frac{1}{2}$ d. (\$7,320.66), which has been carried to the general depreciation fund.

Despite vigorous competition the number of subscribers is growing rapidly. In 1902 the number of connections was 5,479; in 1903, 9,122; in 1904, 11,405, and in 1905, 12,362. The success of the venture is, of course, qualified by the existence of the competing private company.

Any further extension of municipal ownership of the telephone service is now at an end because of the action of Parliament providing for the taking over by the postmaster-general of the entire trunk and local system of the National Telephone Company in 1911 by purchase.

#### FINANCIAL RESULTS OF MUNICIPAL OWNERSHIP IN GLASGOW.

Not infrequently the statement has been made that the city of Glasgow earns so much money from its various enterprises that it is relieved of the necessity of levying any local taxes, the administration of the government being carried on out of the revenues of its enterprises. This statement is the reverse of true, for the enterprises make no contributions whatever to the operating expenses of the city. This is the settled policy of the city, a policy believed to be true of all Scottish cities. In this they differ from many English cities. Each department has to carry itself; but the general policy of the council is that the man who uses gas, water, or electricity, or who rides on the tramways should not be indirectly taxed to support the city government.

However, the earnings of the various enterprises of the city for the year 1905, as heretofore shown, were very substantial. But save as to the appropriation made to the so-called "Common Good" fund, a general trust fund for the corporation, all surplus earnings have been put back into the plants or used for the reduction of the indebtedness of the enterprises.

The following table indicates the fiscal operations of the city's chief undertakings for the year 1905, showing the gross receipts as well as



the net profit after the payment of all operating and maintenance expenses and interest:

FINANCIAL RESULTS OF THE OPERATION OF THE TRAMWAYS, GAS, ELECTRICITY, WATER, AND TELEPHONE UNDERTAKINGS OF GLASGOW FOR THE YEAR ENDING MAY 31, 1905.

Industry.	Gross receipts.	Operating expenses.	Net receipts.	Interest payment.	Net profit.
Tramways.....	\$3,737,005	\$1,884,150	\$1,852,855	\$242,868	\$1,609,987
Gas .....	3,894,061	3,175,907	718,154	446,224	271,930
Electricity.....	906,978	333,026	543,952	185,815	358,137
Water .....	1,212,999	449,095	763,904	479,258	284,646
Telephones .....	269,733	168,772	100,961	44,715	56,246
Total.....	10,020,776	6,040,950	3,979,826	1,398,880	2,580,946

## LIVERPOOL.

The city of Liverpool has a population estimated by the town clerk at 724,000, and an area, according to the Municipal Year Book of 1905, of 17,792 acres. The municipal undertakings include electric light and water supply, electric tramways, markets, laborers' dwellings, extensive baths and wash houses, and many other similar enterprises. The gas supply is in the hands of a private company. Liverpool is also a large landlord and enjoys rents and revenues from this source in excess of \$500,000. The city, through the dock board, enjoys a large profit from the docks which are owned by it.

### TRAMWAYS.

The tramways of Liverpool are among the best in Great Britain. In eight years' time there has not only been no strike, but no complaint or protest has been lodged with the council committee from the department. The attitude of Liverpool, as of other British cities, is that it must be a model employer, though not an employer controlled by its employees. The men are not unionized, nor do they take any special interest in politics.

The condition of the employees under the private company which leased the lines from the city was the special stimulus to the movement for public working. The men were working 13 hours a day. This, with inadequate and slow service, excessive fares, dirty and uncomfortable cars, led the city to take over the undertaking seventeen years before the expiration of the lease.

The advantages of the change to public operation were summarized by Mr. C. R. Bellamy, the general manager, in an interview with the author, as follows:

1. The city enjoys the cheapest of capital, for it can borrow at the lowest possible rates. It secures all the money it needs at about 2½ per cent.



2. Economical administration of the system in the interest of all the citizens.

3. Better treatment of employees.

The experience of Liverpool demonstrates the truth of these claims.

We took over the enterprise in 1897 and paid the existing company £567,375 [\$2,761,130] for the remaining years of its franchise, together with its horse equipment, and in addition assumed the indebtedness of the company amounting to £257,821 [\$1,254,686]. This was for operating equipment alone, for the city already owned the tracks. Of the sum so paid to secure possession of the streets, over \$3,000,000 was for franchises. Four million eight hundred thousand dollars was borrowed for the purpose of introducing electric traction and the extension and development of the system into new routes and territories.

On the beginning of public operation fares were reduced by one-half, while the stages or zones were greatly extended. The total result of these changes in fares and distance was a reduction in charges to the public of about 75 per cent. The annual saving to the people from this lowering of fares over those of the private company amounts to nearly \$2,000,000 a year. This is equivalent to a saving of \$2.40 a head.

The results of public working to the employees are equally significant. Hours were reduced from 13 to 10 per day, 6 days a week. Were the city to pay the men on the same basis of wages and hours as obtained under private control we would be paying £40,000 [\$194,660] a year less than we now are. In addition to this, we give the men free uniforms; sick benefits are also provided for them, as well as a superannuation fund. During disability the men get 15s. [\$3.65] a week for the first six months, and after that 7s. 6d. [\$1.83] during the next six months. In case of death £10 [\$48.67] is paid to the family. Only one-third of this sum is paid by the city, the balance being contributed by the men. By such means as these the employees are attached to the service, and the best class of men are attracted to it.

Despite these increased charges and lower fares the financial results have been very gratifying. The system has been operated by electricity for five years. During that time it has been maintained in first-class condition out of revenue; we have paid all interest charges and set aside a sinking fund, which will extinguish the debt in twenty-five years. We have added \$1,440,000 as a contingency fund to meet any emergencies which may arise, and contributed \$480,000 to the relief of taxation. This was accomplished at a time when the system was being developed and extended. As a matter of fact, at the present rate of debt repayment, the property will be free from any incumbrance within ten or twelve years.

The financial showing for the year ending December 31, 1904, seems to warrant this statement. The total income for the year was £547,625 (\$2,665,017). The total operating expenses and general charges were £367,845 (\$1,790,118), leaving a balance to the net revenue account of £179,780 (\$874,899).



This latter sum was disposed of as follows:

Sinking fund-----	\$267, 506
Interest on loans -----	261, 565
Reserve, renewal, and depreciation account-----	263, 852
Contribution in relief of taxation-----	131, 926

This is in excess of the net revenue account by £10,264 (\$49,950), owing to interest on deposits and other similar income.

The expenditure for maintenance and repairs for 1904, which is included with operating expenses, amounted to £76,492 (\$372,248). This expenditure was for the purpose of maintaining the system at its original efficiency.

The capital expenditure account of the plant to date amounts to £1,916,258 (\$9,325,470), while the total amount paid out of earnings into the sinking fund and reserve, renewal, and depreciation accounts up to December 31, 1904, has been £585,635 (\$2,849,993).

The department has experimented with cars of all patterns, from the large American car to the double-deck English pattern. The type which was most popular with the public was determined, and finally adopted for the entire system. The upper deck of the car is covered with a collapsible top and sides, which may be opened or closed in an instant's time, according to the weather. The outside passengers are permitted to smoke, and this, it is said, has increased the popularity of the service. It has been possible to diminish the number of cars required since the adoption of this type of car. In 1903 the average maximum number of cars in service was 407, and in 1904 it was 398. This decrease in the number of cars was in the face of the fact that the number of passengers carried had increased by 3,585,429. Observations have been taken as to the length of time required for discharging passengers from the two types of cars, and it has been found that the double-deck car is more readily unloaded than the single-deck type. This is accounted for by the fact that there are no signals from the top of the car to stop it, and the passenger has to leave his seat and go to the rear of the car in order to signify his intention of alighting. At the same time safety has been secured by reversing the circular stairs so that the passenger is discharged at the back of the rear platform rather than in the front. The total seating capacity of these cars is from 56 to 64, with standing room for from 4 to 6 persons more.

Experiments have been made with life guards. A simple device has finally been adopted, which consists of a plow-shaped guard, which extends around the trucks and reaches to within a few inches of the ground. The front and rear ends are in the form of a very acute angle, and any obstruction falling in front of the cars is pushed off the tracks clear of the wheels. During eighteen months' time only one person has been killed from getting under the trucks.



The fatalities from accident have been very few. During the year 1904, 123 people fell in front of the cars or were knocked down and passed under the forward platform. All were pushed clear of the wheels, and only three cases of fracture were reported. As a matter of fact, in that year only six fatalities were reported.

Taking the reports year by year since 1897, it appears that the following fatal accidents occurred:

NUMBER OF FATAL ACCIDENTS AND RATIO OF FATAL ACCIDENTS TO PASSENGERS CARRIED ON LIVERPOOL TRAMWAYS FOR EACH YEAR, 1898 to 1904.

Year.	Fatal accidents.	
	Number.	Ratio to passengers carried.
1898 .....	7	1 to 5,967,433
1899 .....	8	1 to 7,971,431
1900 .....	11	1 to 7,487,996
1901 .....	9	1 to 11,234,309
1902 .....	8	1 to 13,666,948
1903 .....	4	1 to 28,264,309
1904 .....	6	1 to 19,440,444

The following table shows the number of passengers, the mileage, and the receipts from 1897 to 1904:

PASSENGERS CARRIED, MILEAGE, AND RECEIPTS OF LIVERPOOL TRAMWAYS FOR EACH YEAR, 1897 TO 1904.

Year.	Passengers.	Mileage.	Receipts.	Year.	Passengers.	Mileage.	Receipts.
1897.....	38,409,084	6,013,182	\$1,414,901	1901.....	101,108,780	10,970,063	\$2,279,386
1898.....	41,772,034	6,279,758	1,529,088	1902.....	109,335,585	11,790,815	2,465,992
1899.....	63,771,450	7,600,546	1,751,594	1903.....	113,057,234	11,734,838	2,552,325
1900.....	82,367,958	9,100,866	2,032,124	1904.....	116,642,663	12,166,419	2,632,047

According to the above table the increase in the number of passengers in 1904 as compared with 1897 was 203.69 per cent, the increase in mileage was 102.33 per cent, and the increase in receipts was 86.02 per cent.

The tramway department maintains a band of forty members, which gives concerts in the parks and gardens throughout the city.

From the reports of the department it appears that the total length of single track is 103 miles, and the average length of a penny (2-cent) stage is  $2\frac{1}{3}$  miles. The average fare paid per passenger is 1.11d. ( $2\frac{1}{4}$  cents), and the car-mile earnings are 10.67d. (21.64 cents). The average fare per passenger under the private company was 2d. (4 cents). The total operating cost per car mile was 7.256d. (14.71 cents). The cost of operation was 65.9 per cent of the total revenue, and the gross profits during the year amounted to 9.9 per cent of the capital expenditure to December 31, 1904.

Of the passengers carried in 1904, 89.39 per cent paid 1-penny (2-cent) and 9.9 per cent paid 2d. (4-cent) fares. Less than 1 per cent paid more than 4 cents.



The extension of the tracks into the suburbs has made accessible for residence extensive areas, and has thus tended to the relief of housing conditions. During the years 1895 to 1898, under the private-company operation, 3,613 houses were erected in the areas added to the city. In 1899, the first year of electric traction, 2,023 houses were erected in the added area, while in the four years following, from 1900 to 1903, 6,696 houses were built, being an advance of 85 per cent over the period from 1895 to 1898.

The city has carried on most of its construction work by direct labor under the city engineer, rather than by contract.

#### ELECTRICITY SUPPLY.

The electricity supply of Liverpool was taken over from a private company in 1896. The price was agreed upon and £145,000 (\$705,643) was paid for the franchise value of the plant. The total purchase price was £400,000 (\$1,946,600).

Since the taking over of the undertaking, the price for lighting has been successfully reduced from 7½d. (15 cents) a kilowatt hour to 3¾d. (7½ cents) a kilowatt hour. A later reduction has brought the price down to 3d. (6 cents). This department supplies the current or motive power for the municipal tramways at 1.159d. (2.353 cents) per kilowatt hour. This covers the working cost and capital charge. The plant has been rapidly developed. A number of new power stations have been erected, and the conduits have been very widely extended. The growth of the undertaking has been so rapid that it has not been necessary to encourage or stimulate use, as it required all of the energy of the management to meet the demands of the public.

In addition to the city of Liverpool, the plant supplies a number of surrounding towns.

The output for the year 1904 was as follows:

	Kilowatt hours.
Lighting and power-----	10, 354, 490
Tramway -----	18, 979, 133
Total -----	29, 333, 623

Motors have been very extensively introduced, there being on December 31, 1904, 1,369 motors employed, with a total capacity of 5,192 horsepower.

The total income for the year 1904 was £236,404 (\$1,150,460). The working expenditure account was as follows:

Generation of electricity-----	\$317, 257
Distribution of electricity-----	23, 130
Rents, rates, and taxes-----	79, 966
Management expenses-----	55, 751
Special charges-----	9, 572
Amount written off for bad debts-----	555
Balance carried to net revenue account-----	664, 229



The net revenue was distributed as follows:

Payment of interest-----	\$260,932
Sinking-fund account-----	186,689
Reserve-fund account-----	79,256
Renewal fund-----	54,943
Contributions to the revenues of the city-----	82,409

The capital expenditure up to December 31, 1904, amounted to £1,718,712 (\$8,364,112). The surplus and sinking-fund account to that date amounted to £327,213 (\$1,592,382).

## MANCHESTER.

The municipal undertakings of Manchester compare in magnitude with those of Glasgow. In efficiency of service they stand among the first in Great Britain. The policy of Manchester, however, unlike that of Glasgow, has been to make use of the profits of the enterprises to relieve the burdens of taxation. Contributions from these sources have been very substantial. In 1905, £111,000 (\$540,182) was contributed by the gas and tramway undertakings alone for this purpose.

Upon the propriety of relieving the taxes out of the earnings of public enterprises a great difference of opinion exists. The town council is a "rate payers" body. The suffrage is limited to those who pay taxes or own property, and, unlike the American system of taxation, the local rates or taxes are paid largely by the occupier or tenant. If the property is vacant, no matter how valuable it may be, it pays no local taxes, or at the most a very small amount.

For this reason any burden added to the tax rate by any industry is carefully scrutinized. Not only is every voter a taxpayer, but by the system of assessment he is made keenly alive to that fact. In England the policy is quite general of using the surplus earnings of the municipal undertakings for the relief of taxation, although this is not a primary motive with the management. The aim is to make the enterprise meet all of its obligations and only incidentally relieve the taxpayer.

Aside from the enterprises commonly undertaken, Manchester has aided in the construction of a ship canal to the sea. The industries of the city were suffering from burdensome freight rates, and the town council loaned £5,000,000 (\$24,332,500) to a private company organized to build a canal for the purpose of securing relief. The interest on this loan has been nearly all met, although no dividends have been earned. It is generally conceded that a great stimulus has been given to the growth of the city and its manufacturing enterprises. The city also owns many markets, which in 1904 turned over £14,000 (\$68,131) to the general revenue fund.



The city has a population of 625,000, but it is surrounded by a number of other large cities, which give the area supplied by some of its undertakings a population of approximately 1,000,000 souls.

Manchester is fortunate in many ways. The water supply has been in the hands of the town since 1851 and its gas undertaking since 1817. The town council also prevented a private company from acquiring the electricity undertaking, so that when it entered the field it was free from the necessity imposed upon Liverpool, Birmingham, Sheffield, and other cities of paying a large sum for the franchises of private owners. The tramway undertaking also was acquired on what was considered a fair valuation. The enterprises of Manchester therefore stand more nearly on a basis of physical investment than those of any large city except Glasgow. They have no heavy load of franchise value to carry as indebtedness.

### TRAMWAYS.

The tramway lines were operated by a private company under a lease from the city up to 1901. The city laid the tracks and the company paid a rental for their use which in twenty-four years amounted to £419,497 (\$2,041,482). On the expiration of the lease the city electrically equipped the horse-car lines and greatly extended them. The system now includes 146 miles of single track, of which 106 miles are within the limits of the city. The remainder are in the surrounding towns, over which the city of Manchester has operating privileges. The city of Salford adjoins Manchester, on the opposite side of the river, and is identified with it as closely as the city of Allegheny is with Pittsburg.

The motives leading to municipalization, as stated by the manager of the tramway system, were:

1. A desire for better service and lower fares. On taking over the lines the city reduced the charges approximately 50 per cent.

2. A desire to improve the condition of the tramway employees, who were worked by the company 70 hours per week. The city has reduced working hours to 54 per week, leaving the wages paid the same as before. The wages now range from \$6.50 to \$7.75 a week, depending upon the length of the employee's service. Free uniforms are supplied the men, and they are given one week's holiday a year on pay. At the car barns recreation rooms, baths, and club accommodations are also provided.

3. But the strongest motive was the monopoly nature of the undertaking. It was felt to be essential that an enterprise so closely connected with the welfare of the people should be run in their interests, rather than for the advantage of the shareholders, whose only interest was one of dividends.

4. It was still further felt that the earnings from the enterprise should go into the city treasury. How profitable the enterprise has been, even in the face of the electrical equipment of the system, the



development of its mileage, and the education of the people to its use, is seen from the fact that the earnings contribute £50,000 [\$243,325] a year in aid of taxation. At the same time the plant has been maintained at its original efficiency out of earnings, while the sum of £185,085 [\$900,716] has been set aside for depreciation, and £67,671 [\$329,321] passed to a sinking fund for the repayment of the debt.

When the city took over the undertaking in 1901, a controversy arose with the private company over the price to be paid. The owners claimed £510,000 (\$2,481,915) for their horse and barn equipment. The city refused to pay this sum, and after long-continued litigation the price was reduced to £335,000 (\$1,630,278). Much of the property was subsequently thrown away as worthless, owing to the change from horse to electrical equipment.

One of the most interesting features of the Manchester tramways is an extensive system of parcel delivery which has been inaugurated. Freight cars were purchased, warehouses for the receiving of packages were opened all over the city, and small delivery wagons were placed on the streets. The object was to do light delivery work for merchants and the people, not only within the city, but in the surrounding area reached by the department. The tramway lines became a clearing house for small freight. Many devices have been adopted for simplifying service and stimulating its use. Stamps are sold, which are used upon the packages the same as postage, and depots have been opened, many of them being in drug stores and other public places. The rates within the city are from 2d. (4 cents) for 14 pounds up to 6d. (12 cents) for 112 pounds. Outside of the city limits the charges are somewhat higher. A special express service is also provided. A number of other schemes, like package insurance, have been developed for making the enterprise as serviceable as possible to the people.

The tramway department has also aimed to aid in the dispersion of the population into the outlying districts through cheaper fares and the extension of routes, but in Manchester, as elsewhere, this policy has been retarded by the owners of suburban property withholding it from development or sale.

On March 31, 1905, the total capital outlay on the system since 1901 amounted to £1,587,931 (\$7,727,666), and the contribution to the sinking fund £67,671 (\$329,321). The mortgage debt at the same date amounted to £1,504,649 (\$7,322,374). The allowances for depreciation and renewal out of earnings and which have accumulated along with the sinking fund now amount to £185,085 (\$900,716).

The capital cost per mile of single track, including all expenditures for the old horse-car lines as well as for car barns and overhead and track equipment, is about £12,590 (\$61,269). This does not include the cost of the power stations which form part of the



plant of the electricity department, which sells current to the tramways at the rate of 1.49d. (3.02 cents) per kilowatt hour. The gross receipts for the year ending March 31, 1905, were £631,956 (\$3,075,-414), the working or operating expenses were £411,597 (\$2,003,037), leaving net receipts of £220,359 (\$1,072,377). This is equivalent to 13.9 per cent on the capital outlay.

Of this sum £50,251 (\$244,546) was paid for interest on the tramway debt, £13,778 (\$67,051) was applied to income tax, rent of leased lines, etc., and the balance was applied to the relief of taxation, to renewals, and the redemption of the debt.

The operating expenses for the year were distributed as follows:

Traffic expenses -----	\$896, 458
General expenses -----	286, 656
General repairs and maintenance -----	249, 554
Power expenses -----	570, 369
Total -----	2, 003, 037

The total operating expenses amounted to 6.99d. (14.18 cents) per car mile. The wages of drivers and guards for the year were £120,109 (\$584,510), and of other traffic employees £16,982 (\$82,643). The local taxes paid were £25,912 (\$126,101). The percentage of operating expenses of receipts was 65.1. The traffic revenue per car mile was 10.68d. (21.66 cents), the average car miles per day per car 96.7, and the average number of rides per head of population 169.

Of the total passengers carried during the year 5.40 per cent paid but half-a-penny (1-cent) fares; 71.94 per cent paid 1-penny (2-cent) fares, and the balance paid from 1½d. to 4d. (3 to 8 cents). Less than 3 per cent, however, paid more than 2½d. (5 cents), the average fare paid per passenger being only 1.19d. (2.42 cents).

The increase in passengers carried and earnings since the opening of the system appears from the following table. It should be borne in mind that the city did not commence the operation of the system in its entirety till April 1, 1903.

TRAFFIC REVENUE AND PASSENGERS CARRIED ON THE MANCHESTER TRAMWAYS, 1901-2 TO 1904-5.

Year.	Traffic revenue.	Number of passengers carried.
1901-2 .....	\$445, 864	23, 590, 288
1902-3 .....	1, 490, 366	66, 849, 457
1903-4 .....	2, 935, 385	120, 772, 368
1904-5 .....	3, 058, 736	126, 900, 875

ELECTRICITY SUPPLY.

In Manchester the electric lighting plant, in addition to supplying light and power to consumers, supplies current for the tramways. This is a great advantage to both departments. It saves a duplica-



tion of capital outlay, and in addition gives the plant a day load which equalizes the permanent charges of the plant. The price charged the tramway department for power is 1.49d. (3.02 cents) a kilowatt hour, which is approximately the cost of production, including operating cost and interest and sinking-fund charges. The plant consists of two large generating stations, and the total cost of the system to date is £2,199,690 (\$10,704,791). The plant not only supplies the city and seven other surrounding districts, but its capacity is sufficient to meet the demands of large future growth in consumption.

Under the terms of the act of Parliament authorizing the undertaking, the city is required to set aside as a sinking fund a sum each year to pay the debt in 25.75 years. The capital outlay on land, plant, buildings, etc., amounted on March 31, 1905, to £2,199,690 (\$10,704,791), and the sinking fund, renewals, etc., to £234,226 (\$1,139,861). The mortgage debt at that date amounted to £1,978,235 (\$9,627,081).

During the eight months' operation in 1894, the year when the plant was opened, the gross receipts amounted to £10,198 (\$49,629). By 1905 they had increased to £302,200 (\$1,470,656). During the same time the units sold increased from 439,379 to 33,686,710. The average price in the former year was 5.5d. (11.15 cents) per kilowatt hour; in the latter year, 2.14d. (4.34 cents). The operating expenses in 1905 were 0.75d. (1.52 cents), and the total costs, including generation, distribution, interest, and sinking fund, were 2.12d. (4.30 cents) per kilowatt hour.

For the fiscal year 1905 the revenue account was as follows:

Gross receipts from all sources-----	\$1, 470, 656
Operating and general expenses (including maintenance)-----	726, 666
	<hr/>
Net receipts-----	743, 990

Of the net receipts £25,000 (\$121,663) was carried to renewals suspense account, £64,144 (\$312,157) was applied to payment of interest, £54,009 (\$262,835) to sinking fund, £5,183 (\$25,223) to repayment of loan, and the balance was carried to the reserve fund.

Since the plant was opened £52,964 (\$257,749) has been paid into the city treasury out of the profits of the undertaking for the relief of taxation, and the sum of £284,875 (\$1,386,344) into the sinking fund and reserve fund.

While the street lighting of the city is furnished by the gas department, the electric lighting enterprise serves a number of surrounding towns and has recently entered into a contract to supply the community of Gorton with arc lights at an annual charge of £8 (\$38.93) per lamp.



The reduction of charges which has taken place under public management is stated by the town clerk as follows:

Prior to the corporation opening their electricity works in July, 1893, there was no public supply. The rates charged at that time are contrasted with present rates in the following statement, the changes having taken place gradually:

July, 1893: Lighting and power.—8d. (16 cents) per unit (flat rate), or 2d. (4 cents) per unit consumed, plus a fixed charge of £12 (\$58.40) per annum per kilowatt of maximum demand.

September, 1905: Lighting.—4½ d. (9 cents) per unit (flat rate), or 1¾ d. (3½ cents) per unit consumed, plus a fixed charge of £7 (\$34.07) per annum per kilowatt of maximum demand. Power.—1d. (2 cents) to 1⅞ d. (3.81 cents), according to hours of user.

### GAS SUPPLY.

The gas supply of Manchester has been in the hands of the municipality since 1843. From 1817 to that date it was under the control of the police commissioners, who were the governing body of the town. The total value of the works, property, and other assets on March 31, 1905, after writing off depreciation, was £2,856,463 (\$13,900,977), while the outstanding debt against the enterprise was but £1,380,309 (\$6,717,274). The net value in excess of indebtedness was therefore £1,476,154 (\$7,183,703).

The financial operations of the plant during the 61 years ending in 1904 are indicated by the following figures, taken from the reports of the department:

The net receipts, after providing for depreciation, amounted to £5,297,986 (\$25,782,649). Of this amount £1,230,565 (\$5,988,545) was applied to interest on loans, £1,195,833 (\$5,819,521) to redemption of loans, £96,293 (\$468,610) to extension of works, £2,629,301 (\$12,795,493) to relief of taxation, and £145,994 (\$710,480) to contingent fund.

In sixty-one years' time the amount applied to the relief of taxation alone was almost equal to the value of the plant, while at the same time more than one-half of the value of the property has been relieved by payments into a sinking fund. But this is only a portion of the exhibit. The price charged for gas in 1817 was 14s. (\$3.41) per 1,000 cubic feet, and in 1843, when the undertaking was transferred to the city, the price charged was 6s. (\$1.46) per 1,000 cubic feet. The rate has been successively reduced and is to-day but 2s. 3d. (54.8 cents) to ordinary consumers within the city limits, and 2s. 6d. (60.8 cents) to those without. For power purposes the rate is 2s. (48.7 cents).

In 1903 the city tried the experiment of supplying gas stoves free of charge. It was found that the very poor could not lay aside sufficient money to buy gas stoves, and in consequence the use of gas



as a fuel was comparatively insignificant, only about 4,000 stoves being in use. The result of this experiment was immediate. At present the city loans nearly 24,000 stoves, which consume 350,000,000 cubic feet, the increase for one year being 70,000,000 cubic feet. The city looks upon this as a good investment, aside from the increase in comfort, cleanliness, and decency which has followed the wider use of gas as fuel in place of coal. No charge is made for the use of the stoves nor rental for the use of meters.

The gross receipts for the year ending March 31, 1905, were £688,954 (\$3,352,795), the operating expenses were £538,164 (\$2,618,975), and the net receipts, not including £2,551 (\$12,414) interest and special sinking-fund charge, were £150,790 (\$733,820). The return on the capital cost was 6 per cent. One person in five uses gas, on approximately all of the population. The candlepower of the gas is 17.04, and the leakage very small, being but 2.88 per cent. The cost of coal and cannel (including oil) per ton carbonized was 10s. 8.85d. (\$2.61), from which 10,967 cubic feet was obtained. The total value of residuals during the year was £114,658 (\$557,983).

#### WATER.

The water supply of Manchester is derived from Lake Thirlmere, nearly 100 miles to the north. The storage capacity of the lake has been greatly increased, and the water is delivered to the city by gravitation. Several other towns along the route are also supplied, as well as a number of neighboring boroughs. This extension to the lake region has already involved a cost of £3,383,443 (\$16,465,525), and before its completion it will necessitate an additional outlay of from seven to twelve million dollars.

In addition to the ordinary domestic supply, the city maintains a hydraulic power supply for use by hoists, presses, cranes, and other heavy work.

The water department is maintained by a small tax levy, which is designed to cover the value of the free water supplied to the city. The domestic rate is 8d. (16 cents) on the pound of house rental—that is, every tenant of a house pays to the water department a water tax of 16 cents for every \$4.87 of rental value. The method of assessment in vogue in America, based upon the number of persons in the family, the number of rooms in the house, or the number of plumbing connections, is nowhere in vogue in Great Britain.

The gross receipts of the department for the year 1905 were £324,695 (\$1,580,128), and the operating or working expenditure was £106,652 (\$519,022). A considerable deficit in reality existed at the end of the year, amounting to £80,833 (\$393,374), owing to the heavy interest charges and sinking-fund appropriations which had to be made good out of the taxes.



The total expenditure on the plant to date, including the hydraulic-pressure plant, is £6,908,678 (\$33,621,082); the loans now outstanding amount to £5,679,836 (\$27,640,922); the difference, £1,228,842 (\$5,980,160), having been repaid out of earnings and taxation.

### SHEFFIELD.

Sheffield is the center of the cutlery and small-metals industry. It is a strong trades-unionist city, with a population of 430,000, or about that of the city of Cleveland, Ohio. The water supply was taken over by the city in 1888, the tramways in 1896, and the electricity undertaking in 1898. The gas supply is still in private hands.

### TRAMWAYS.

The working of the tramways was taken over by the city from a private company in 1896. As in many other cities, the rails had been laid by the city and the actual operation leased to a private company. The system was one of horse traction. The service was poor and the fares excessive. This was no doubt largely due to the fact that under expiring leases the company did not feel justified in going to the expense of reequipping the lines. On the expiration of the leases the property was taken over at a valuation based upon the physical value of the plant. A committee of the town council was sent to the Continent to study traction matters, and on its return a system of overhead electric propulsion was decided on. The length of hauls was thereafter increased from 1 to 2½ miles for a uniform fare of 1d. (2 cents). This is now the maximum charge for any haul within the city. The maximum distance which may be traveled for this fare is 3¼ miles. Half-mile stages at ½d. (1-cent) fare are also provided. The present average fare paid per passenger is 0.903d. (1.8 cents), while the average fare per mile is a half penny (1 cent).

The city has also quadrupled the mileage of the system, greatly increased the frequency of the service, and installed an up-to-date power system and equipment. The rails are of the girder-groove pattern, and the cars of the double-deck type.

Here, as elsewhere, the condition of the employees under private management was a constant source of trouble. When the city took over the plant, wages were at once increased and the hours reduced. The rate of wages is now 7d. (14 cents) per hour, with a nine and a half hour day. Two free uniforms are supplied the men a year, and one week's holiday is given on full pay. The city has established recreation clubs for the men, with a cafe, games, concerts, lectures, and reading rooms.

A definite policy has also been adopted for the correction of the housing evil. Under powers from Parliament, the city has purchased



and in the outskirts and erected workingmen's dwellings away from the city center. The uniform fare of 1d. (2 cents) tends to disperse population rather than congest it. However, under the system of bringing all cars to the center of the city, the longest ride possible is but 3¼ miles. The department also cooperates with the school authorities and sells school tickets at ¾d. (1½ cents) each. These are supplied the children through the educational department. Free tickets are supplied to philanthropic agencies and to nurses, while annual free outings are given the poor children of the city.

Here, as elsewhere, a great increase of use followed municipalization and the introduction of electric traction. In 1901, 34,370,763 passengers were carried. Two years later the number had increased 30 per cent, while the receipts in the same period increased from £133,795 (\$651,113) to £206,860 (\$1,006,684). A considerable increase in mileage had taken place in these years. From 1903 to 1905, the number of passengers still further increased to 63,952,000, and the gross earnings to £242,852 (\$1,181,839). The growth of the system in car miles run, passengers carried, and traffic receipts from the opening of the electric lines in 1899, is as follows:

CAR MILES RUN, PASSENGERS CARRIED, AND TOTAL RECEIPTS OF SHEFFIELD TRAMWAYS, 1900 TO 1905.

Year ending March 25—	Car miles run.	Passengers carried.	Total receipts.
900 (a) .....	1,343,020	19,209,714	\$427,122
901 .....	2,315,347	34,370,763	651,113
902 .....	3,791,993	49,176,631	933,575
903 .....	4,777,146	54,946,915	1,006,684
904 .....	5,768,231	61,450,993	1,137,929
905 .....	6,049,899	63,952,283	1,181,839

<sup>a</sup> Electric trams began operation Sept. 5, 1899.

Although the electric system has been in complete operation less than three years, the tramways have contributed £66,139 (\$321,865) in relief of taxation, while £234,557 (\$1,141,472) has been turned over to the sinking fund, £53,771 (\$261,677) has been contributed to a reserve or renewal fund, and an unappropriated surplus of £45,565 (\$221,742) has been accumulated. This is in addition to the regular interest payments. In six years' time, fully one-half of which was a period of construction, the city has earned enough at ½d. and 1d. (1 and 2 cent) fares to carry the undertaking and make these substantial contributions to the relief of taxation and the improving of the financial status of the enterprise. For the fiscal year ending March 25, 1905, the financial showing of the undertaking was as follows:

Total receipts, £242,852 (\$1,181,839) ; operating expenses, £163,283 (\$794,617) ; interest on capital, street improvements, and sinking-



fund payments, £62,242 (\$302,900), leaving a surplus of £17,327 (\$84,322).

The rates of fare are relatively very low, even below those of Glasgow. The average fare is 0.903d. (1.833 cents). The average distance traveled for 1d. (2 cents) is 2.48 miles. In Bradford it is 1.7 miles; in Glasgow 2.3 miles; in Leeds 1.76 miles; in Liverpool 2.38 miles; in Manchester 2.1 miles. The  $\frac{1}{2}$ d. (1-cent) fares are for half-mile distances.

The Sheffield management is occasionally criticised by other managers for its failure to set aside a sufficient sum for depreciation. This matter has also received considerable discussion in the council chamber. The policy of the department differs from many other large cities in this respect.

The reply which has been made to the criticism is that there is no need of writing off anything for depreciation so long as the system is maintained at its original efficiency out of earnings, while at the same time the debt is being repaid within the statutory period by contributions to the sinking fund. Thus the general repairs and maintenance charges for 1905, which appear under working expenses, were £37,132 (\$180,703). If this is adequate, and the allowances for the sinking fund are continued, as they must be under the law, the system will come into the hands of the city at the end of a generation in a state of efficiency and free from all indebtedness. For this reason, the tramway committee says, there is no necessity for further allowances for depreciation. The policy of the management is to give the present generation the advantage of lower fares rather than to tax it excessively for the future.

Inasmuch as considerable criticism of the Sheffield system has been made in the trade journals, misapprehension is likely to exist unless further reference is made to the fact that English standards are very different from American standards. For when it is said that depreciation allowances are inadequate or a deficit is shown in the enterprise, the fact should not be overlooked that a legal provision requires the payment of the indebtedness of the enterprise in a period approximating thirty years. In the acceptance of English criticism, therefore, it is necessary to be sure that we are dealing with the same standards of measurement.

#### **ELECTRICITY SUPPLY.**

The public supply of electricity is seen under disadvantageous conditions in Sheffield. This is true for two reasons. The city has a private gas company that sells gas at from 1s. 2d. (28 cents) to 1s. 6d. (37 cents) per thousand cubic feet. This competition the public electric-lighting plant has to meet, and only under the best



possible management can electricity compete with gas at these figures. Moreover, the city tramways have their own power plant and do not purchase from the electricity department, as is done in many other municipalities. In the second place, the city purchased an inadequate plant from a private company. It paid approximately \$1,500,000 for franchises, good will, and old machinery, from which but little substantial return has been received. Under such conditions the management is a factor of prime importance.

The plant was purchased as a going concern in 1897. Within the intervening years the capital expenditure of the enterprise has been increased to £804,527 (\$3,915,231). During the same period the earnings have grown from £19,039 (\$92,653) to £59,396 (\$289,051). This has been achieved by extending the supply wherever the prospect of sufficient revenue warranted it.

In 1905 the working or operating cost per kilowatt hour was 0.86d. (1.75 cents).

When the plant was taken over in 1897 the rates charged the small consumer for lighting were reduced 20 per cent, or from 5 to 4d. (10 to 8 cents) per unit, while additional special discounts were allowed larger consumers. The present rate for power is 1d. (2 cents) per kilowatt hour, but the discounts allowed large consumers reduce this price to 0.6d. (1.2 cents).

The department maintains a corps of skilled engineers, who canvass the city for consumers. Houses are wired, meters installed in factories, and the services of a consulting engineer furnished in the remodeling of a plant. The department rents power motors, and in every possible way stimulates use among all classes. In addition to this it has a large factory and store for the manufacture and sale of fittings, transformers, radiators, stoves, lamps, etc. It wires and keeps fittings in repair and does 85 per cent of the electrical work of the city.

The plant is just reaching a point where the development and educational work has begun to yield its proper returns, and while the net receipts (gross receipts less operating expenses) for the year 1905 were but £42,405 (\$206,364) or 5.27 per cent of the capital invested, the future gives promise of rapid growth in the returns.

#### GAS SUPPLY.

Sheffield is especially interesting because of the fact that it has a private gas company which competes vigorously with the city's electric-lighting plant and at the same time is apparently giving satisfactory service to the public, for it supplies the cheapest gas of any public or private plant in the large cities of the United Kingdom. The anomaly is the greater inasmuch as the company is earning 10 per cent dividends on its capital stock, and has been for thirty or



forty years. It supplies gas at so low a rate that the city can not afford to light its own streets with electricity from its own lighting plant.

The charter of the company from Parliament indicates the sort of supervision to which the franchise corporation in Great Britain is subject. Like all similar enterprises the company acts under a special charter as well as the general orders of Parliament. It can not water its stock at all. Its capital account represents actual investment in the plant. When it plans a new extension or development it can not pay for it out of the earnings. It must do so through the sale of stock or debentures to the highest bidder at public auction. If any premium is realized on the sale the premium must be put into the capital account and can not be distributed as a dividend. The stock originally issued by the company is entitled to earn 10 per cent dividends. The debenture bonds or stocks issued for extensions yield only 4 per cent interest. This stock now sells on a 3½ per cent basis.

Whenever the earnings of the company, after the deduction of interest on the bonded debt, exceed 10 per cent of the original capital, the price of gas to the consumer must be reduced. As the earnings of the company have been growing with great rapidity, the price of gas has been rapidly reduced. The amount of gas sold, capital invested, capital invested per thousand cubic feet produced, and price of gas for the years from 1870 to 1904, according to a statement furnished by the manager, were as follows:

AMOUNT OF GAS SOLD, CAPITAL INVESTED, AND PRICE OF GAS CHARGED BY SHEFFIELD UNITED GASLIGHT COMPANY, 1870 TO 1904.

Year.	Cubic feet of gas sold.	Capital invested.		Price of gas per 1,000 cubic feet.		
		Total.	Per 1,000 cubic feet of gas sold.			
1870 -----	588,226,000	\$1,674,334	\$2.85			\$0.75
1880 -----	1,014,533,000	2,522,915	2.49	\$0.61	\$0.57	.53
1890 -----	1,737,547,000	3,236,334	1.86	.53	.49	.45
1900 -----	2,680,306,000	4,422,700	1.65	.45	.41	.37
1904 -----	2,745,565,000	4,565,692	1.66	.41	.37	.32

Since March 31, 1905, the rate has been 1s. 6d. (37 cents) per thousand cubic feet for ordinary domestic use; and 1s. 2d. (28 cents) for public lighting, gas engines, and large consumers. Despite the constant reduction, the regular 10 per cent dividend on the capital has never been omitted.

The company supplies an area of about 135 square miles with 528 miles of mains. Its consumers number 76,000. The loss from leakage in 1904 was only 5.23 per cent.

Like the gas undertakings which are under municipal management, the Sheffield company promotes the use of gas stoves and man-



ties on easy payments or on rental. The employees of the company call upon consumers every fortnight, clean the burners, globes, and chimneys, renew the mantles, and relieve the consumer of the details of this care.

The cost of coal in 1904 was 7s. 6d. (\$1.83) per ton. This, however, was more than repaid to the company from the sales of coke, tar, ammonia, and other residuals, from which 8s. 9d. (\$2.13) a ton was realized. In addition to that, 10,419 cubic feet of gas was obtained from every ton of coal, which, at 1s. 5d. (34½ cents), the average price paid by all consumers, was equivalent to 14s. 9d. (\$3.59) more. The candlepower of the gas was 17.5.

An examination of the revenue account for the half year ending June 30, 1905, shows the following receipts and expenditures:

Receipts:

Sale of gas-----	\$525, 499
Residual products-----	285, 742
Rents, etc-----	6, 078
Total -----	<u>817, 319</u>

Expenditures:

Manufacture of gas-----	445, 952
Distribution of gas-----	64, 121
Rents, rates, and taxes-----	45, 477
Total -----	<u>555, 550</u>

Net receipts-----	261, 769
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### WATER SUPPLY.

The water supply of Sheffield was taken over by the city in 1888 from a private company. It was acquired on the basis of a capitalization of the net earnings. The supply is obtained by impounding in upland gathering grounds some distance from the city. The water is delivered by gravitation, and no pumping station is maintained.

The manager says that the transfer from private to public operation has produced the following results: (1) A reduction in the water rates of 20 per cent; (2) the city has given free water supply to all public enterprises; (3) the undertaking has provided for the interest charge on all new work; (4) it has earned a sufficient revenue to pay £163,569 (\$796,009) for the redemption of the debt, and (5) it has also accumulated a reserve fund out of earnings of £134,119 (\$652,690).



## BIRMINGHAM.

The city of Birmingham acquired the ownership of its water supply in 1831; it took over its gas in 1875, and assumed the electricity and tramway undertakings but recently. The tramways are still but partially in the hands of the city, as all the leases or franchises have not expired. Birmingham was a pioneer in many municipal matters, notably in its slum clearance and housing schemes. It is an industrial city with a population approximating 535,000.

## TRAMWAYS.

Birmingham constructed  $33\frac{1}{2}$  miles of tramway lines under the act of 1870. The tracks were leased to private companies which operated them under agreements to pay the city an annual sum in the form of rental sufficient to pay the interest on the investment and also to repay the entire cost of the system in twenty-one years. Prior to the expiration of the first lease December 31, 1903, municipal operation was discussed, and finally decided upon by the town council. Powers were then obtained from Parliament to take over the tramway undertaking as rapidly as the leases expired, and to open additional routes which will bring the lines within the city up to 60 or 70 miles. Many of the leases will expire January 1, 1907, free from any indebtedness. In the meantime all of the lines within the city are being electrically equipped.

The experience of Birmingham is unique in two respects. The rentals from the private companies for the use of the tracks during the years of their operation were sufficient to pay the interest charges against the tramway debts, and also to repay the entire capital expenditure for tramway construction. Thus the city came into possession of a system of tracks at no cost to itself. These tracks were of little value, however, because the lines had been worked as horse, steam, and cable roads, and as the city decided to replace these with overhead electric traction, the tracks had to be relaid and the system rebuilt. At the same time the city refused to buy the working equipment of the private companies, which in other towns has sometimes been taken over by the authorities at a valuation and then thrown upon the scrap heap, through the substitution of electric power.

On the expiration of the first lease advantageous proposals were made to the city by a private company for the surrender of the balance of the leases and the granting of a new one in their stead to run for twenty-four years. The company proposed, on condition that the municipality should equip the system for overhead traction—

1. To pay interest and sinking-fund charges on the cost of the equipment.



2. To pay as rental £12,000 (\$58,398) per annum during the first three years;  $7\frac{1}{2}$  per cent of the gross earnings with a minimum of £21,000 (\$102,197) per annum during the next five years, and 15 per cent of the earnings with a minimum of £33,000 (\$160,595) per annum during the remainder of the term. Out of this fund the city was to maintain the lines. It was also to supply current from the municipal lighting plant at an agreed price.

Another offer was received even more advantageous than the above, but both were finally rejected, and on January 1, 1904, the city began the operation of 1 mile of track with overhead traction. According to the statement of the town clerk, the reasons which led to this action were:

1. The corporation [that is, the city] thereby obtained complete control of their streets.

2. Greater facilities could be given to the traveling public, and the profit derived from the working would benefit the rate payers.

3. Improved conditions of labor.

The report of the first fifteen months of operation of the single mile of track shows a capital expenditure for permanent way, cars, and sites for depots and car sheds of £68,694 (\$334,299). A large part of this was in anticipation of further extensions when other lines are taken over upon the expiration of the leases.

The gross earnings of a single mile of system for the twelve months ending March 31, 1905, were £19,102 (\$92,960), and the operating cost was £10,338 (\$50,310), leaving gross profits of £8,764 (\$42,650) to be applied to the payment of interest and sinking fund and general reserve. There were 4,709,798 passengers carried, at an average fare of 0.86d. (1.74 cents). The earnings per car mile were 14.5d. (29.4 cents). There are no zones, the uniform rate of fare being 1d. (2 cents), except on workmen's cars, where a slightly lower rate is in force.

As in a number of other cities, the tramway undertaking does not supply its own power, but purchases it from the electricity department, which is also under municipal control.

#### GAS.

The gas supply at Birmingham was acquired in 1875 by purchase from private companies. It is one of the best public gas undertakings in the United Kingdom. Birmingham not only supplies its own population, but has extended its mains into many of the outlying towns, the population served being in excess of 700,000.

The gas committee has pursued an energetic policy of extending the use of gas among all classes of citizens. This is accomplished by charging a low price, which at the present time ranges from 1s. 10d. (45 cents) to 2s. 6d. (61 cents) per thousand cubic feet, according to the consumption, less a cash discount of 5 per cent. For public light-



ing a charge of 1s. (24 cents) per thousand cubic feet is made. The average net price which the city receives from all classes is 2s. 1½d. (52 cents) per thousand.

By various devices gas has been brought to the very poor. Cooking ranges are installed, either on rental or on sale. To those who can not make payment for gas in the ordinary way, or are too poor to install fixtures, prepayment meters are supplied, by means of which on the insertion of a penny (2 cents) in the slot enough gas is released for immediate use. The gas department also installs fixtures for house lighting. By these means over 36,000 connections have been made which would probably not have been secured, while the demand for installations is at the rate of 500 per month. Twenty thousand cooking stoves are supplied and in use in the city.

The present ratio of consumers to the entire population of the territory served is as one is to seven. The result of this widespread use is greatly increased comfort and cleanliness.

The capital account of the plant March 31, 1905, was as follows:

Capital invested .....	\$12, 491, 838
Sinking fund repaid out of earnings.....	3, 686, 018
Outstanding debt of undertaking.....	10, 912, 586

The financial operations for the year ending March 31, 1905, were as follows:

Gross receipts .....	\$4, 269, 093
Operating expenses.....	3, 427, 972
<hr/>	
Net receipts (gross receipts less operating expenses).....	841, 121
Interest payments.....	407, 467
Redemption of debt.....	182, 903

During the year the plant contributed the sum of £54,526 (\$265,351) to the relief of taxation, and the sum of £14,963 (\$72,817) in aid of public lighting.

There were 6,293,810,600 cubic feet of gas sold during the year, of 16.36 candlepower. The cost of coal was 10s. 1½d. (\$2.46) a ton, and the production of gas per ton was 10,497 cubic feet, or in the neighborhood of \$5 worth of gas. The residuals and by-products sold realized £197,184 (\$959,596). This was nearly one-fourth of the total revenue of the plant, and approximately three-fifths of the total cost of the coal carbonized.

#### ELECTRICITY SUPPLY.

The electricity supply was acquired by Birmingham from a private company in 1900. The franchises or working powers had been granted in 1891 and had many years to run before their expiration. Under the acts of Parliament the city could only acquire the undertaking by agreement with the company, and in consequence had to pay a large sum for the franchise. The total price paid was £420,000



(\$2,043,930), which was obtained by capitalizing the revenues of the undertaking. The capital cost of the plant to that time was but £219,000 (\$1,065,764), and the valuation placed upon the franchise was, therefore, £201,000 (\$978,167). This excessive capitalization has been a serious burden upon the plant. Extensive additions have also been required, while the subsequent purchase of the tramway undertakings led the electricity committee to erect a large power plant.

The total capital cost of the plant up to March 31, 1905, was £665,424 (\$3,238,286), which sum has, however, been reduced by sinking-fund payments to the extent of £39,562 (\$192,528).

For the fiscal year ending March 31, 1905, the financial operations were as follows:

Gross receipts .....	\$341, 769
Operating expenses .....	149, 187
Net receipts (gross receipts less operating expenses) .....	192, 582

The net receipts were disposed of as follows:

Interest .....	\$90, 415
Redemption of debt .....	49, 662
Reserve fund .....	52, 505

The average price charged for service was 3.98d. (8.08 cents) for private lighting and 1.82d. (3.69 cents) for power, while the average working cost per unit was 1.58d. (3.21 cents).

#### WATER SUPPLY.

Like the cities of Glasgow, Liverpool, and Manchester, Birmingham has been compelled to go a great distance in order to secure an adequate water supply. Except in Boston and New York, there is nothing in America to compare with the big water undertakings of Great Britain. From the absence of big inland lakes or pure rivers, the cities have been compelled to go to natural impounding reservoirs for supply. Birmingham, like Liverpool, has gone to Wales and acquired immense reservoirs, some 70 miles away. From this source the water is conveyed to the city in aqueducts. This latter project has only recently been carried through at a cost of £5,620,150 (\$27,350,460). The total outlay of the entire system, however, is £7,856,527 (\$38,233,789).

The revenue account for the year ending March 31, 1905, was as follows:

Gross receipts .....	\$1, 316, 763
Operating expenses .....	514, 233
Net receipts (gross receipts less operating expenses) .....	802, 530

Inasmuch as the interest charges on the investment alone amount to £244,938 (\$1,191,991) a big deficit exists which has to be made good from taxation and other sources.



## APPENDIX A.

CHARGES FOR GAS, WATER, AND ELECTRICITY IN VARIOUS CITIES,  
1904-5.

[Compiled by James Carter, borough treasurer, Preston.]

Town.	Popu- lation (1901).	An- nual charge for wa- ter used for do- mestic pur- poses in a house rent- ing for £15 (\$73).	Net charge for 1,000 cubic feet of gas.	Maxi- mum charge per kil- owatt hour for elec- tricity.	Town.	Popu- lation (1901).	An- nual charge for wa- ter used for do- mestic pur- poses in a house rent- ing for £15 (\$73).	Net charge for 1,000 cubic feet of gas.	Maxi- mum charge per kil- owatt hour for elec- tricity.
Accrington	43,095	\$5.48	\$0.6793	\$0.0811	Leeds	428,968	\$3.65	\$0.5475	\$0.0811
Ashton - under- Lyne	43,890	6.99	.5678	.0811	Leicester	211,579	4.26	.5678	.0811
Bacup <sup>(a)</sup>	22,505	5.48	b.7908		Lincoln	48,784	3.65	.5070	.1622
Barrow-in-Fur- ness	57,586	3.70	.6084	.1217	Liverpool	684,947	1.83		.0760
Bath	49,817	3.65	b.5070	.1014	Macclesfield	34,635	4.56	.6084	
Belfast	348,965	4.87	.4867	.1217	Manchester	543,872	2.43	.5678	.1115
Birkenhead	110,915	3.04	.6084	.1014	Middlesbrough	91,302	4.56	.5881	.1217
Blackburn	127,626	5.84	.7503	.1217	Nelson	32,816	4.56	.6692	.0912
Blackpool	47,346	5.48	.5678	.1622	Newcastle	215,328	(b)	.4380	
Bolton	168,215	4.62	.6034	.0811	Northampton	87,021	3.65	.5273	.1217
Bootle	58,556	2.74	.5800	.0760	Norwich	111,733	5.32	.7908	.1014
Bournemouth	47,003	b.3.35	b.7300	.1217	Nottingham	239,743	3.95	.6489	.1014
Bradford	279,767	5.48	c.5070	.0811	Oldham	137,246	5.48	.5475	.0811
Brighouse	21,735	3.65	.6692	.1217	Oxford	49,413	3.95	b.7300	b.1217
Brighton	123,478	2.74	b.7097	.1419	Plymouth	107,636	3.41	.4258	.0811
Bristol	328,945		.5273	.1014	Portsmouth	188,133	3.89	.5678	.0912
Burnley	97,043	3.65	.5475	.0311	Preston	112,989	4.26	b.7198	b.1419
Burton-on-Trent	50,386	5.25	.6286	.1217	Reading	72,217	3.29	.6895	.1217
Bury	58,029	7.30	.4461	.1217	Rochdale	83,114	7.30	d.6185	.1217
Cardiff	164,333	4.44	b.6692	.1419	Rotherham	54,349	5.78	d.6387	.0912
Carlisle	45,478	3.65	.5475	.1014	St. Helens	84,410	3.80	.5475	.0912
Cheltenham	49,439	3.65	b.5395	.1115	Salford	220,957	3.35	.5171	.0709
Chester	36,281	b.6.08	b.7300	.0912	Southampton	104,824	3.35	.7300	.0912
Coventry	69,978	4.38	.6034	.1217	Southport	48,087	5.48	.6185	.1217
Croydon	133,895	4.44	d.6286	.1622	South Shields	97,263	3.88	.6895	.1419
Darlington	44,496	4.71	.4867	.1622	Stafford	20,894	3.65	.5881	.1014
Darwen	38,211	5.78	.6530	.0912	Stalybridge	27,674	6.08	.5678	.0811
Devonport	70,437	4.26	.6084	.0912	Stockport	78,897	5.48	.6084	.1014
Dewsbury	28,050	4.38	.7097	.1217	Stockton-on- Tees	51,478	5.02	.5475	.1217
Derby	105,912	4.56	b.6084	.1217	Sunderland	146,077	3.65	.4663	.1014
Dudley	48,809	(b)	(b)	.1217	Swansea	94,537	4.02	.6895	.1217
Eastbourne <sup>(a)</sup>	43,337	3.65	.6489	.1217	Tunbridge Wells	33,388	4.64	.7300	.1217
East Ham	96,018	b.4.11	b.7097	.1217	Tynemouth	51,366	4.56	.5273	.1014
Exeter	46,940	3.65	b.7300	.1014	Wakefield	41,544	5.32	.6084	.0811
Gateshead	109,888	4.62	.4380	.1419	Warrington	64,242	4.38	.6084	.1217
Halifax	104,936	5.37	.4968	.0811	West Brom- wich	65,175	4.38	.6084	.0912
Hastings	65,528	4.87	.7300	.1217	West Hartle- pool	62,627	5.48	.5009	.0811
Heywood	25,461	7.30	.6895	.1217	Westminster	183,011	2.92	.7300	b.1217
Huddersfield	95,047	6.08	.6387	.0912	Widnes	28,580	3.45	d.3041	
Islington	334,991	3.89	.6590	.1419	Wigan	60,764	3.95	.6692	.1014
Kensington	176,628	b.2.89	b.7300	b.1115	Wolverhamp- ton	94,187	4.56	b.6084	.1014
King's Lynn	20,289	3.80	b.8517	.1014	York	77,914	3.50	.5273	.1115
Kingston-upon- Hull	240,259	3.65	.6084	.1014					
Lancaster	40,329	4.87	.4867	.1014					
Leamington	26,888	2.74	.6084	.1217					

<sup>a</sup> Charged on gross rental.<sup>b</sup> Private company.<sup>c</sup> Gross charge.<sup>d</sup> Average charge.



## APPENDIX B.

## ANALYSIS OF PUBLIC ELECTRIC TRAMWAY ACCOUNTS OF VARIOUS CITIES, 1903-4.

[From the Municipal Journal for August 4, 1905.]

City.	Popula- tion served.	Date started.	Length of street route.	Gauge.	Total capital outlay.	Passen- gers car- ried.	Car miles run.
			<i>Miles.</i>	<i>Ft. in.</i>			
Aberdeen .....	165,000	Aug., 1898	14.14	4 8½	\$1,530,062	15,538,167	1,379,723
Ayr .....	33,000	Sept., 1901	5.69	4 8½	349,293	3,316,380	353,945
Birkenhead .....	113,300	Feb., 1901	13.52	4 8½	1,683,614	11,327,932	1,349,701
Blackpool .....	50,000	1885	9.62	4 8½	1,300,222	6,357,218	735,103
Blackburn .....	188,000	1887	14.13	4 0	1,558,268	7,742,692	951,484
Bolton .....	171,100	Jan., 1900	25.13	4 8½	2,455,193	19,895,496	2,188,030
Bournemouth .....	60,000	July, 1902	12.25	3 6	1,254,642	9,363,985	1,022,164
Bradford .....	324,000	July, 1898	48.52	4 0	3,981,795	39,639,414	4,546,942
Brighton .....	123,500	Nov., 1901	9.95	3 6	1,181,640	10,999,046	1,151,477
Burnley .....	154,000	Dec., 1901	10.77	4 0	858,782	7,514,063	896,397
Burton-on-Trent .....	52,000	Aug., 1903	5.74	3 6	401,486	2,566,134	282,378
Cardiff .....	168,000	May, 1902	14.63	4 8½	3,344,366	23,574,204	2,643,762
Chester .....	39,000	Apr., 1903	2.50	3 6	321,666	2,602,835	260,785
Darwen .....	40,000	Oct., 1900	4.36	4 0	385,777	2,236,102	253,345
Dover .....	42,000	Sept., 1897	3.00	3 6	203,663	2,871,332	280,901
Dundee .....	163,000	July, 1900	12.65	4 8½	1,281,749	11,420,985	942,969
East Ham .....	104,000	June, 1901	6.82	4 8½	659,854	12,950,269	807,002
Farnworth .....	50,000	Jan., 1902	4.33	4 8½	212,647	1,532,293	242,524
Glasgow .....	1,000,000	July, 1894	70.34	4 7½	10,257,998	188,962,610	16,291,082
Halifax .....	168,000	June, 1898	33.41	3 6	1,666,582	16,322,059	1,387,885
Huddersfield .....	100,000	Feb., 1901	28.00	4 7½	2,003,645	11,899,287	1,632,000
Hull .....	248,000	July, 1899	13.60	4 8½	1,868,624	24,220,718	2,512,821
Ilford .....	52,000	Mar., 1903	6.50	4 8½	646,631	5,274,025	577,034
Kirkcaldy .....	34,100	Feb., 1903	5.25	3 6	383,144	2,770,936	301,779
Lancaster .....	40,300	Jan., 1903	3.41	4 8½	132,403	1,079,772	153,692
Leeds .....	446,400	Feb., 1894	42.51	4 8½	5,391,970	60,739,234	6,091,437
Liverpool .....	760,000	1868	57.00	4 8½	9,068,650	113,057,234	11,734,838
Manchester .....	750,000	June, 1901	79.49	4 8½	7,229,731	120,772,368	13,759,071
Nelson .....	33,000	Feb., 1903	2.74	4 0	148,394	1,420,759	171,132
Newcastle-on-Tyne .....	257,000	Dec., 1901	23.36	4 8½	5,131,690	39,715,120	4,059,907
Newport .....	76,000	Apr., 1903	8.50	4 8½	799,172	4,473,411	635,000
Nottingham .....	240,000	Jan., 1901	16.25	4 8½	2,724,452	27,876,889	2,512,000
Oldham .....	100,000	Dec., 1900	17.93	4 8½	2,103,243	12,968,880	1,420,455
Portsmouth .....	198,000	Sept., 1901	14.50	4 7½	3,087,337	18,204,426	1,828,193
Rochdale .....	86,000	May, 1902	3.96	4 8½	405,798	1,156,300	194,490
Rotherham .....	58,000	Jan., 1903	8.33	4 8½	514,691	4,914,479	525,840
Salford .....	300,000	Oct., 1901	32.50	4 8½	2,487,609	33,956,405	4,726,446
Sheffield .....	425,000	1872	32.50	4 8½	4,809,640	61,450,993	5,768,231
Southampton .....	107,800	July, 1898	9.72	4 8½	966,589	9,890,952	1,144,350
Southport .....	49,000	June, 1900	8.42	4 8½	576,018	3,837,208	431,019
Stockport .....	110,000	Aug., 1901	12.27	4 8½	682,653	3,170,554	606,476
Sunderland .....	158,900	June, 1900	10.92	4 8½	1,349,188	14,848,958	1,433,463
Wallasey .....	56,500	Mar., 1902	8.48	4 8½	622,664	6,564,493	757,688
Warrington .....	80,000	Apr., 1902	6.42	4 8½	460,191	3,940,305	419,036
Wolverhampton .....	94,200	Mar., 1902	7.33	3 6	894,657	4,555,435	507,527
Yarmouth .....	51,250	June, 1902	3.59	3 6	214,851	1,611,699	222,350



ANALYSIS OF PUBLIC ELECTRIC TRAMWAY ACCOUNTS OF VARIOUS CITIES, 1903-4.

[From the Municipal Journal for August 4, 1905.]

City.	Total re- ceipts.	Working ex- penses.		Net receipts.		Inter- est chg's and lease rent- als.	Re- pay- ment chg's (sink- ing fund).	Surplus (+) or defi- cit (-).	Provi- sion for depre- ciation and re- serve.	Con- tribu- tion to relief of tax- ation.	
		Am't.	Per cent of re- c'pts.	Am't.	Per cent of cap- ital.						
Aberdeen .....	\$311,801	\$180,323	58	\$131,478	8.59	\$50,558	\$11,665	+	\$69,255	\$69,255	-----
Ayr .....	69,756	37,092	53	32,664	9.35	11,203	4,336	+	17,120	17,120	-----
Birkenhead .....	272,261	169,101	62	103,160	6.13	51,233	42,713	+	9,164	9,164	-----
Blackpool .....	204,690	135,644	66	69,046	5.31	40,986	27,802	+	258	-----	-----
Blackburn .....	217,445	142,924	66	74,521	4.78	42,913	56,612	-	25,004	-----	-----
Bolton .....	462,785	266,276	58	196,509	8.00	59,532	66,447	+	70,530	59,532	\$10,998
Bournemouth .....	264,723	147,338	56	117,385	9.36	44,047	35,701	+	37,637	-----	-----
Bradford .....	960,832	631,206	69	299,626	7.52	<sup>a</sup> 234,415	-----	+	65,211	14,196	-----
Brighton .....	225,144	196,393	87	28,751	2.43	35,034	16,974	-	23,257	-----	-----
Burnley .....	212,851	149,129	70	63,722	7.42	29,841	16,673	+	17,208	17,208	-----
Burton-on-Trent .....	58,120	43,404	75	14,716	3.67	7,460	3,762	+	3,494	3,494	-----
Cardiff .....	511,065	318,031	62	193,034	5.77	93,529	68,540	+	30,965	1,961	3,124
Chester .....	43,390	25,948	60	17,442	5.42	9,860	5,927	+	1,655	-----	-----
Darwen .....	60,204	40,942	68	19,262	4.99	11,733	9,646	-	2,117	5,110	-----
Dover .....	57,615	42,407	74	15,208	7.47	<sup>a</sup> 10,731	-----	+	4,477	-----	-----
Dundee .....	216,253	138,798	64	77,455	6.04	33,272	24,333	+	19,850	13,831	-----
East Ham .....	171,792	118,071	69	53,721	8.14	28,255	15,986	+	9,480	6,599	-----
Farnworth .....	36,431	23,603	65	12,828	6.03	15,772	5,718	-	8,662	-----	-----
Glasgow .....	3,527,487	1,736,464	49	1,791,023	17.46	313,286	221,684	+1,	256,053	1,134,391	<sup>b</sup> 121,662
Halifax .....	332,329	247,014	74	85,315	5.12	48,456	34,460	+	2,399	2,399	-----
Huddersfield .....	320,619	168,697	53	151,922	7.58	66,340	51,770	+	33,812	56,875	-----
Hull .....	492,777	307,534	62	185,243	9.91	48,334	44,519	+	92,390	36,425	55,965
Ilford .....	112,991	66,029	58	46,962	7.26	14,823	9,894	+	22,245	22,245	-----
Kirkcaldy .....	49,585	37,098	75	12,487	3.26	9,791	2,292	+	404	195	-----
Lancaster .....	20,396	22,649	111	<sup>c</sup> 2,253	-----	6,059	5,475	-	13,787	-----	-----
Leeds .....	1,369,521	757,218	55	612,303	11.36	134,505	131,853	+	345,945	92,887	253,058
Liverpool .....	2,610,361	1,633,299	63	977,062	10.77	257,594	251,102	+	468,366	312,244	156,122
Manchester .....	2,977,719	1,910,121	64	1,067,598	14.77	354,189	130,923	+	582,486	339,161	243,325
Nelson .....	22,653	17,359	77	5,314	3.58	3,801	1,129	+	384	-----	-----
Newcastle - on- Tyne .....	896,263	587,386	66	308,877	6.02	140,622	110,168	+	58,037	-----	-----
Newport .....	115,107	75,591	66	39,516	4.94	21,218	16,351	+	1,947	-----	-----
Nottingham .....	623,895	346,782	56	277,113	10.17	74,618	73,620	+	128,875	65,610	63,265
Oldham .....	294,000	210,651	72	83,349	3.96	74,574	46,860	-	38,085	-----	-----
Portsmouth .....	452,181	211,338	47	240,843	7.80	89,266	73,577	+	78,000	78,000	-----
Rochdale .....	33,973	32,902	97	1,071	.26	13,875	6,842	-	19,646	-----	-----
Rotherham .....	103,856	75,927	73	27,929	5.43	10,161	6,137	+	11,631	11,714	-----
Salford .....	966,721	678,916	70	287,805	11.57	133,970	78,696	+	75,139	16,741	58,398
Sheffield .....	1,137,929	761,135	67	376,794	7.83	149,509	94,381	+	132,904	164,346	40,144
Southampton .....	260,363	178,309	68	82,054	8.49	28,883	22,970	+	30,201	5,869	24,332
Southport .....	85,874	53,463	62	32,411	5.63	18,507	15,563	-	1,659	-----	-----
Stockport .....	92,824	62,846	68	29,978	4.39	20,420	6,492	+	3,066	-----	-----
Sunderland .....	304,979	177,710	58	127,269	9.43	40,105	40,538	+	46,626	27,092	19,534
Wallasey .....	174,576	121,565	70	53,011	8.51	19,778	7,874	+	25,359	21,899	12,896
Warrington .....	79,148	58,456	74	20,692	4.50	14,716	9,786	-	3,810	-----	-----
Wolverhampton .....	114,805	72,564	63	42,241	4.72	25,685	11,159	+	5,397	16,911	-----
Yarmouth .....	38,328	28,902	75	9,426	4.39	7,640	2,832	-	1,046	-----	-----

<sup>a</sup> Includes repayment charges.      <sup>b</sup> Payment to "Common Good."      <sup>c</sup> Loss.



## ANALYSIS OF PUBLIC ELECTRIC TRAMWAY ACCOUNTS OF VARIOUS CITIES, 1903-4.

[From the Municipal Journal for August 4, 1905.]

	Traffic receipts per car mile.	Ex-penses per car mile.	Average fare per passenger.	Electricity supplied by—	Number of units (kilo-watt hours) used.	Price paid or cost of electricity per kilo-watt hour.
Aberdeen .....	\$0.2230	\$0.1308	\$0.0199	Electric department ..	1,525,708	\$0.0308
Ayr .....	.1918	.1048	.0205	Electric department ..	324,157	.0264
Birkenhead .....	.1971	.1254	.0235	Own works .....	2,128,607	.0146
Blackpool .....	.2737	.1845	.0317	Electric department ..	1,008,529	.0371
Blackburn .....	.2219	.1502	.0272	Electric department ..	1,785,712	.0304
Bolton .....	.2095	.1217	.0231	Electric department ..	3,098,292	.0254
Bournemouth .....	.2496	.1441	.0272	Own works .....	1,601,039	.0174
Bradford .....	.2069	.1453	.0237	Electric department ..	7,731,563	.0213
Brighton .....	.1947	.1705	.0203	Electric department ..	1,774,988	.0304
Burnley .....	.2348	.1663	.0280	Electric department and Nelson corporation.	1,461,700	.0363
Burton-on-Trent ..	.1995	.1537	.0219	Electric department ..	332,827	.0296
Cardiff .....	.1874	.1203	.0211	Own works .....	5,896,506	.0091
Chester .....	.1656	.0996	.0215	Electric department ..	239,072	.0355
Darwen .....	.2215	.1616	.0252	Electric department ..	422,583	.0347
Dover .....	.1953	.1510	.0191	Electric company .....	319,413	.0558
Dundee .....	.2260	.1472	.0187	Electric department ..	1,661,721	.0302
East Ham .....	.2069	.1464	.0130	Electric department ..	920,696	.0355
Farnworth .....	.1500	.0973	.0237	Electric department ..	317,126	.0101
Glasgow .....	.2146	.1067	.0185	Own works .....	15,372,609	.0085
Halifax .....	.2384	.1780	.0203	Electric department ..	2,659,920	.0329
Huddersfield .....	.1900	.1034	.0260	Own works .....	2,565,643	.0069
Hull .....	.1949	.1225	.0203	Own works .....	3,285,621	.0123
Ilford .....	.1904	.1144	.0209	Electric department ..	563,464	.0304
Kirkcaldy .....	.1602	.1229	.0174	Electric department ..	395,071	.0355
Lancaster .....	.1327	.1474	.0189	Electric department ..	199,600	.0406
Leeds .....	.2219	.1243	.0223	Own works .....	9,518,680	.0069
Liverpool .....	.2176	.1392	.0225	Electric department and Bootle corporation.	17,978,718	.0219
Manchester .....	.2133	.1389	.0244	Electric department ..	16,815,764	.0302
Nelson .....	.1312	.1014	.0158	Electric department ..	170,611	.0406
Newcastle-on-Tyne	.2166	.1447	.0221	Own works .....	7,757,885	.0073
Newport .....	.1750	.1190	.0248	Electric department ..	641,860	.0304
Nottingham .....	.2447	.1381	.0221	Electric department ..	3,763,601	.0254
Oldham .....	.2030	.1482	.0223	Electric department ..	2,177,309	.0304
Portsmouth .....	.2323	.1156	.0233	Own works .....	2,695,605	.0112
Rochdale .....	.1707	.1691	.0288	Electric department ..	393,180	.0298
Rotherham .....	.1941	.1443	.0207	Electric department ..	806,291	.0304
Salford .....	.2044	.1435	.0262	Electric department and Manchester corporation.	6,102,524	.0383
Sheffield .....	.1961	.1320	.0185	Own works .....	9,460,618	.0097
Southampton .....	.2206	.1557	.0256	Electric department ..	1,298,392	.0457
Southport .....	.1953	.1241	.0219	Electric department ..	492,261	.0304
Stockport .....	.1494	.1036	.0286	Electric department ..	790,892	.0304
Sunderland .....	.2121	.1239	.0205	Electric department ..	1,562,748	.0379
Wallasey .....	.2264	.1604	.0262	Electric department ..	1,243,340	.0331
Warrington .....	.1855	.1395	.0197	Electric department ..	496,268	.0386
Wolverhampton ..	.2225	.1429	.0248	Electric department ..	773,208	.0337
Yarmouth .....	.1689	.1300	.0233	Electric department ..	172,939	.0507



## CONCILIATION IN THE STOVE INDUSTRY.<sup>(a)</sup>

BY JOHN P. FREY AND JOHN R. COMMONS.

### INTRODUCTORY.

The manufacture of stoves is peculiarly an American industry. Prior to its development in this country the so-called stoves made in the United States and in other countries were simply iron fireplaces. Such stoves were made in colonial times, but establishments devoted to their manufacture could not develop on a large scale until means of transportation were widely extended. The first successful foundry devoted solely to the manufacture of stoves was the one at Taunton, Mass., established in 1829, and that locality remains an important center of the industry. Albany and Troy, N. Y., followed, and, aided by the Erie Canal, became the leading centers until the time of the civil war. At an early date the Ohio valley stove foundries, along with those at Pittsburg and St. Louis, supplied the western and southern trade. The pioneer stove foundry at Quincy, Ill., was established in 1849, and since 1865 Detroit, Mich., has taken a leading place. Other localities with a large output at the present time, some of them with only a single large foundry, are Chicago, Ill., Newark, Ohio, Aurora, Ill., and Piqua, Ohio.

The total output of the industry has never been a matter of investigation by the census authorities, <sup>(b)</sup> the only statistics being those compiled by the National Association of Stove Manufacturers. The first president of this association at the time of the first convention, in 1872, estimated that the value of the output at that time was \$40,000,000.<sup>(c)</sup> This was doubtless an exaggerated estimate, since the total output for 1904 was only about \$80,000,000, of which about \$56,000,000 covers the business of what are known as stove manufac-

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<sup>a</sup> The writers desire to acknowledge their indebtedness to Mr. Thomas J. Hogan, secretary of the Stove Founders' National Defense Association since 1890, for permission to examine the records of the association and also for valuable suggestions and criticisms. They have also profited through consultations with Mr. Martin Fox, former president of the Iron Molders' Union of North America. Both Mr. Hogan and Mr. Fox have read the manuscript and have freely offered corrections wherever necessary.

<sup>b</sup> The United States Census Bureau has prepared schedules for a report on this industry.

<sup>c</sup> Metal Worker, May 7, 1904, page 37.



turers, including heating and cooking stoves and ranges for burning coal, wood, and gas. This includes only a small portion of the furnace business and not the manufacture of steam and hot water heaters.

It was also estimated that the number of stoves manufactured in 1830 was 25,000; in 1860, 1,000,000, and in 1870, 2,100,000. At the present time there is such a variety of new products, including furnaces, gas and oil stoves, etc., that the comparative increase can scarcely be shown by the number of stoves manufactured, but rather by the value of the product, as stated above. The estimates, in any case, are only approximations.

For our present purpose the greatest interest lies in the number of molders employed in the industry. Formerly the stoves were all made of cast iron, but recent changes have introduced steel, sheet iron, etc., so that, relatively to the total output, the molder's work is smaller than it was in earlier days. However, the molders' wages amount to a large proportion of the manufacturers' cost, variously estimated at 40 to 50 per cent, and it is this fact that intensifies the effects of the molders' unions on the industry. At the present time there are probably 23,000 molders employed in the making of stove plate in the United States and Canada, of whom 22,000 are members of the Iron Molders' Union of North America.

The employers' association, known as the Stove Founders' National Defense Association, includes 66 firms and corporations, producing about 75 per cent of the output. It is the conference agreements and methods of conciliation which have been in vogue between these two organizations since 1891 with which this article deals. To understand these agreements and methods it will be necessary to preface the account with a brief statement of the strikes and lockouts which have occurred in the industry and of the causes which provoked these disturbances.

## CAUSES OF STRIKES AND LOCKOUTS.

### "BOARD PRICES" AND PERCENTAGES.

The causes leading to strikes and lockouts in the stove industry have been numerous and cover a wide range of questions, many of which were looked upon as matters of principle by the contestants. Naturally the question leading most often to open rupture was that of the wages paid, and as these were paid upon a piece-price basis, supplemented by a percentage paid upon them, the conflicts were sometimes upon the amount of percentage to be paid, and, again, upon the piece or "board" price.

In the stove industry there has never been a determined effort made on the molders' part to have the method of payment changed



from the piecework to the day-work system. The great majority of strikes or lockouts resulting from disputes over the wage question arose from the amount of percentage to be paid. Numerous conflicts affecting individual shops have resulted from this question, and in several instances they took the form of general strikes or lockouts affecting many of the foundry centers and thousands of molders simultaneously. The question of the piece or "board" price or the total price of a stove has also led to open hostilities, but not to the same degree. These two questions are the only ones which, at any time, have led to a general strike or lockout, with one exception, namely, the sending broadcast of the Bridge and Beach patterns in 1887.

The terms "board price" and "percentage" are used frequently in this narrative, and definitions of them are necessary to make clear the method of determining the wages which the stove molder receives. The molding of stoves, ranges, heaters, and furnaces is done almost exclusively on the piecework system; in other words, the stove molder is paid in proportion to the good work he turns out. This piece price is generally termed the "board price," from the fact that the separate patterns are placed upon a follow board for the purpose of assisting the molder in making the mold. It remains practically a fixed price, though it is subject to change from time to time should it develop that the price set is high or low in comparison with similar work made in the district. For example, the total molding price for a range may be \$4.27 in a certain foundry. Investigation may indicate that \$4.35 is paid in the same district for molding a similar stove. A question would then arise as to whether the lower price should be advanced or the higher reduced, and the adjusting of this question would be determined by the prices secured elsewhere on work of the same general character. Since but few molders make the castings for an entire stove or range, the total molding price is divided and placed upon the separate pieces or boards, and from this division the term "board price" came into use.

In nonunion stove foundries the firm or its representative sets the total or stove price and the individual or "board prices," which must be accepted by the molders. In foundries where the molders' price committee is recognized and dealt with by the firm the committee have a voice in setting both the stove or total price and the prices that are to be paid for the individual castings. In every instance the "board" or piece price forms the basis for whatever wages the molder receives. General advances or reductions in wages are not made by revising the "board prices," but by paying an additional percentage upon them, or in case of a reduction below "board prices," by deducting a certain percentage from them. There have



been but few instances in the stove industry where the flat "board price" alone has been paid. The amount of percentage paid has been subject to great fluctuations in the past, 25 per cent off "board prices" being the lowest of which record can be found, and 100 per cent advance on "board prices" being the highest.

### APPRENTICES, "BUCKS," AND UNIONISM.

From the earliest times the number of apprentices employed has proved a fruitful source of discord. The president of the international union, in 1876, said, "it has given us more trouble than all others combined."<sup>a</sup> The foundrymen have claimed that they should be free to employ as many apprentices as were desirable to them, or as many as were necessary to supply the demands of the trade, and the molders have contended that the majority of apprentices were employed for the purpose of cheapening the cost of production and throwing journeymen molders out of employment. This question frequently led to arbitrary action on both sides. It came up for discussion on almost every occasion when foundrymen and molders met to discuss their grievances.

An equally prolific cause of friction was the employment of molders' "bucks" or "berkshires." These were men who acted as molders' helpers, and in the course of time would become proficient enough to do the work alone. In fact, when they had worked as "bucks" for four years they were frequently taken into the molders' union as journeymen molders.

The apprentice and the "buck" occupied a different relation, both with the foundryman and with the molder. The apprentice entered the foundry with the expectation of learning the trade. He worked alone and received his wages from the foundryman, while the "buck" beginning as an unskilled laborer, had no guaranty that he would ever become a journeyman mechanic. He worked with the molder as an assistant and received his wages, in most instances, from the molder himself and not from the foundryman, and was generally hired or discharged by the molder. Disputes arising between a foundryman and the molders over the employment of a large number of apprentices were questions that arose between the foundryman on the one hand and the molders on the other; but the disputes arising over the employment of "bucks" were more complicated. At times the foundryman would demand that the molders work with "bucks," and again the foundryman was indifferent toward this practice, and the question of their employment became an internal one among the molders. Some molders desired to employ them and

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<sup>a</sup> Proceedings of the eighth annual session of the Iron Molders' International Union, 1867, page 13.



others refused to work should they do so. This internal dissension also frequently led to lockouts or strikes.

The stove industry was not exempt from those industrial disturbances which have their origin in the workman's desire to build up and strengthen his trade union and the employer's effort to break down or destroy the labor organization. In fact, this industry had its full share of such disputes. Frequently the molders were advised that they must make an immediate choice between withdrawing from their union or leaving the shop. Sometimes this took the form of demanding their signature to individual contracts. In instances where they were well organized the firms resorted to the lockout to accomplish their purpose. On the other hand the molders would strike because some of their committeemen had been discharged or refused recognition, or because a nonunion molder had been employed, or because the employer would not agree to employ none but union molders.

#### **"GANGWAY 'COUNT," PRICE BOOK, AND "DISCOUNT."**

Since there are a number of castings required for each stove, and since many firms have large lines of various stoves and ranges, the foundries are equipped with a large number of patterns. Each molder while working has from three to thirty patterns on his "floor"—the term used to denote the amount of space occupied by the molder in making his work. From these patterns he makes each day the castings ordered, varying in number from 8 or 10 to 100 or more, depending upon the character and size of the work. As a piece price is set upon each casting, it is necessary for the molder to know the price paid for each piece, to have an account of all the work he produces each day, and to have a record of all bad castings made by him. Otherwise he would have no accurate knowledge of the sum owed to him by the firm for good castings produced in any given period. Many firms were unwilling to furnish their molders with a list of the prices they were paying for their work, and frequently there would be two or three prices on the same piece in the same foundry. This condition easily led to abuses which were the cause of much friction, suspicion, and bitter feeling. For the purpose of safeguarding their interests the molders would demand that the foundryman should furnish them with a price book in which all piece prices would be indicated. Should the foundryman decline to do so a strike might follow.

Knowledge of the prices paid for the work was but the first step. After the castings were made it was also necessary that an accurate account of all pieces made should be rendered and credited to the molder. The removal of castings from the foundry to the cleaning room was often done in a slipshod manner, and an opportunity was



afforded dishonest foremen to give credit for less work than had been made. Again castings which were broken through carelessness by other workmen in the cleaning and stove-mounting departments were thrown away. By these methods the molders were frequently imposed upon, and to prevent this they would insist upon having each day's work counted after they had placed the castings at the end of their floor and on the edge of the gangway running through the foundry. This was known as the "gangway count." Many firms refused to adopt this method, and several of the most severe strikes in the union's history resulted. The necessity for this "gangway count" may be judged from the following extract from an open letter written by Mr. Henry Cribben, first president of the Stove Founders' National Defense Association, and published in the *Artisan* in April, 1904. Speaking of the molders during the period prior to the organization of the Defense Association, he says:

Their condition was sad to contemplate. \* \* \* in many of the stove foundries of the United States and Canada stoves were molded by the piece and credit given for the work when the stove was put together by the mounter, thereby compelling the molder to assume the loss caused by careless handling of the castings by both the cleaners and mounters. They were also compelled to bear the loss of castings taken from the shelves by the shipping clerk or his assistants to fill orders for repairs to the trade without any credit to the molder. And the systems then in practice in many of the stove foundries of the country were but little better than petit larceny.

At the present day the "gangway count" is in almost universal practice.

With the price book in his possession, and a "gangway-count," the molder's interests were even yet not fully protected. Some of the work would contain imperfections for which the molder was responsible, and for such work he was not paid. It was "discounted" against him. The same abuses which existed without a "gangway count" might intrude themselves in the matter of "discounting" bad work. Many imperfections would not be discovered until the castings had been cleaned in the cleaning room, and unless the molder was afforded an opportunity of seeing his "discounted" work more castings than he was responsible for losing would be charged against him. To protect themselves on this point the molders would demand the right of seeing all of their "discounted" castings before they were broken up for remelting. The foundrymen were not always agreeable to granting this privilege, and we have another cause of strikes.

#### HOURS OF LABOR

The molding of stove castings has always been done by hand labor, even up to the present time. The work is of such a character and the materials used are of such a nature that machinery has never



been used except in a few rare cases. Even then the molding machine is operated by hand. The only steam power used is for the purpose of operating tumbling barrels in which the castings are cleaned, of operating a few emery wheels, and in furnishing power to the large fans or blowers used for producing the blast in the cupola where the iron is melted. Under such conditions the hours when the molders' work began or terminated were irregular and led on many occasions to serious friction. In certain foundries molders began their day's work as early as 3 or 4 o'clock in the morning. Sometimes they did this because of the firm's desire, and again because of the molder's inclination to increase his earnings. In fact, the abuses growing out of the time at which the day's work should begin may be attributed to an element among the molders themselves as much as to the foundrymen. Few instances are on record where the foundryman locked out his molders on account of their unwillingness to begin work at an earlier hour than that in vogue in other industries, but many strikes occurred because the molders desired to have an hour set at which all molders should be required to begin work. For a number of years this question has ceased to cause trouble, 7 o'clock being universally the hour at which the molding starts.

Equally prolific of strife was the hour at which the "heat" should begin, or, in other words, the time at which melted iron should be furnished to the molders to fill their molds. Frequently the blast was not turned into the cupola in which the iron was melted until a late hour, thus keeping the molders waiting and retarding the closing hour of labor.

#### **"DULL IRON."**

For several reasons unnecessary to discuss the melted iron furnished the molder would at times be too "dull," or cold, to properly fill his mold, thus resulting in worthless castings. The molder might have been in no way responsible for this. His molds might have been well made, nevertheless the "dull iron" had resulted in a bad casting. The foundrymen often refused to pay for such castings, placing the entire loss upon the molder. The molders protested, doing so at times with so much vigor that an open rupture occurred between them and their employers.

The foregoing are the main causes of disputes which in the history of the stove industry have caused strikes and lockouts, but which have ceased to do so under the agreement system of the past fifteen years. In addition, there have been minor causes, or causes which became obsolete many years ago, such as store orders, duebills, truck pay, State bank money, and so on. Regarding these causes it is unnecessary to do more than to mention them.



## STRIKES AND LOCKOUTS.

It is not intended to compile a complete account of all the strikes in the history of the stove industry prior to the agreement system of 1891. Such a compilation would be impossible, because the records do not exist. It is not too much to say that there must have been several hundred small strikes in single shops or in localities, lasting a few days or involving a few men, of which neither the records of the union nor of the manufacturers contain accounts.

Neither would such a compilation add greatly to the conclusions to be drawn. It is enough to know that strikes and lockouts recurred again and again in the same shops and localities, sometimes resulting in the success of the molders, sometimes in the success of the manufacturers, but never resulting in a permanent settlement or an assured prospect of peace. A defeat of either side, often after a prolonged trial of strength and great loss and suffering, meant only a determination not to abide the results, but to reorganize and prepare to retaliate at the first favorable opportunity. Often, also, demands were made by one side and acceded to by the other without a strike or lockout, merely because the party was taken suddenly at a disadvantage and saw no hope of successful resistance. He again waited his time until conditions were reversed, and then, without ceremony or conscience, repudiated his concessions and delivered in turn his ultimatum. This unsettled condition of the industry will be sufficiently plain from a brief review of such strikes as are of record.

The first strike of which there is a record occurred in Philadelphia, May 16, 1855, and lasted about ten weeks.<sup>(a)</sup> This strike led to the organization, June 16, 1855, of the first union of iron molders which has had a continuous existence, now known as No. 1, Philadelphia.<sup>(b)</sup> The cause of the strike was a third reduction in the percentage paid during the period beginning 1847. There had previously been two reductions of 10 per cent each, the one in 1855 being 15 per cent. All of the stove and hollow ware molders in the city went on strike, except in one shop which agreed to pay whatever the strikers succeeded in winning. The strike was settled by the firms calling a meeting with the molders' committee and withdrawing the reduction. While this strike was in progress the molders at Albany, N. Y., also went on strike, and won their demands.<sup>(c)</sup>

In October, 1857, there was another strike in Philadelphia, of union and nonunion men, against a reduction of 12½ per cent. This

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<sup>a</sup> Iron Molders' Journal, March, 1902, page 131.

<sup>b</sup> There had been a temporary union in Philadelphia in 1837, and one in Cincinnati in 1847.

<sup>c</sup> Iron Molders' Journal, July, 1905, page 505.



strike was lost in one shop but won in others.<sup>(a)</sup> It is interesting as being the occasion of the first appearance as a trades-unionist of William H. Sylvis, afterward the president of the national union and a leader of the American labor movement to the time of his death in 1869. Sylvis, during this strike, was recording secretary and a member of the "committee on corners;" that is, pickets.

The panic of 1857 was followed by reductions in wages, and in 1858 there is known to have occurred three strikes of molders to regain the prices paid prior to 1857. These were at Providence, R. I., and Port Chester and Albany, N. Y., the latter being also in resistance to an overplus of apprentices and the store-order system. The Albany strike led to the first organization of employers, known as the "Founders' League." One of its purposes was that of importing workmen from other parts of the country and from Europe. It was these strikes in 1858 that led to the call for the first national convention of molders, which met in February, 1859.

The circular calling this convention was sent out by the Philadelphia union upon the proposition of Mr. Sylvis, and among other things, declared that "the interests of capital and labor are one and inseparable," and enumerated the benefits that would accrue from having prices throughout the country regulated by one standard.<sup>(b)</sup> This idea of equalizing competitive prices, appearing for the first time as a reason for organizing a national union, appears again and again throughout the history of the union, with its sequel in the agreement system of the present time.

The national union organized in Philadelphia, July, 1859, was composed entirely of delegates from local unions of stove molders. In fact, the stove and hollow ware industries were much the larger part of the molders' work. It was not until the convention of 1861 that machinery molders appeared. At the convention of 1859 the unions represented were those of Philadelphia, St. Louis, Albany, Troy, Rochester, Cincinnati, Providence, Jersey City, Peekskill, Utica, Port Chester (New York), Wilmington, and Baltimore. These, including Louisville (not represented), were centers of the stove industry at that time. Prior to the meeting of the national convention in July there had been local strikes in Troy and Philadelphia. At the time of the convention there was a strike in progress at Albany against the "berkshire" system and against retention by the employers of one-third of the molders' wages.<sup>(c)</sup> The most important act of the convention was a resolution to aid the Albany local. The strike lasted six months and the molders won. In November following the convention 100 men walked out from Filleys' shop in St. Louis, in

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<sup>a</sup> Life of Wm. H. Sylvis, by James C. Sylvis, Philadelphia, 1872, pages 26, 28.

<sup>b</sup> Life of Wm. H. Sylvis, page 28.

<sup>c</sup> Proceedings, 1859, page 5.



resistance to a demand that they should quit the union or quit the shop. The firm imported workmen from Holland and Germany, and the strike, lasting seven months, was lost. This incident is mentioned because in those days it was an innovation to import strike breakers. The industry was localized, transportation was slow and expensive, and the many small strikes resolved themselves simply into a trial of endurance, with the employer and his workmen remaining on familiar terms. But the presence of imported strike breakers added bitterness to the struggle, which increased in later years when the practice was systematized and conducted on a large scale.

At the time of the third convention of the union, in January, 1861, the number of locals had increased to 44. The president called attention to the "numerous strikes" that had occurred during the preceding year. The Albany employers had retaliated, had defeated the union, and had reestablished the "berkshire" system. Other strikes mentioned were at Buffalo over the "berkshire" system and at Spuyten Duyvil against a reduction of wages. Severe defeats weakened the union, and there was no convention in 1862. A strike in Philadelphia in 1863 lasted nearly a year and was lost.<sup>(a)</sup> At that time Sylvis had begun his aggressive movement or reorganization and the convention of January, 1864, showed 71 locals in existence. During that year there occurred advances in wages, varying from 15 per cent to 40 per cent in different localities, and these were accompanied by strikes in Lowell, Louisville, Quincy, Spuyten Duyvil (New York), Indianapolis, Cincinnati, Covington, St. Louis, Philadelphia, and Worcester. In 1865, 21 strike circulars were issued and wages were advanced or reductions resisted. Louisville secured 100 per cent advance on "board prices," and other places lower percentages. The longest strike was that at Detroit, lasting four months.

Up to this time the strikes had all been local in character, some of them sanctioned and aided by the national organization and others unsanctioned and independent. In 1866, however, the employers organized throughout the country under the name of the "Iron Founders' Association" and brought about what was known as the "great lockout." This involved Troy, Albany, Cincinnati, Covington, California (Ohio), Ironton, Indianapolis, Cleveland, London (Canada), and Richmond, Va. The employers held two conventions, one at Albany in March and one at Cincinnati at a later date. The president of the national union laid a 5 per cent tax upon the earnings of all members. He visited Albany at the time of the employers' convention, and in a letter addressed to the convention asked for a conference. This letter is of interest as showing the first

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<sup>a</sup> Proceedings of the fifth annual session of the Iron Molders' International Union, 1864, page 8.



attempt toward an understanding on a national scale between the employers and the union. It is here reproduced in full.<sup>(a)</sup>

ALBANY, March 14, 1866.

*To the President and Members of the Stove and Hollow Ware Manufacturers' Convention:*

GENTLEMEN: Allow us to congratulate you upon coming together for the purpose of organization, and to say that we have long held that organization upon your part was necessary, because we felt that organization on both sides would result in such a mutual understanding as would prevent the unpleasant differences which so frequently exist between us.

We are organized for the purpose of securing to ourselves certain rights and privileges which, unorganized, we found impossible to secure. In all our legislation we have in view your interests as well as our own; and most of the difficulties that have existed between us have arisen from your opposition to our organization, more than to the principles upon which it is founded; and if sometimes we have been placed in a position of apparent injustice, it was because of your refusal to recognize us as men, or meet us in council for the purpose of harmonizing our interests, which we believe to be mutual in fact, and should be so in practice.

Again, we say, we are glad you are organizing, because we hope it will result in a mutual and beneficial understanding between us. We ask for this a careful consideration, and, should you think well of it, we will be pleased to meet you, or a committee from your body, for an exchange of views.

Yours truly,

WM. H. SYLVIS, *Pres. I. M. I. U.*  
FRANK SIMPSON.

Address Stanwix Hall.

No reply was made to this communication, but an "obnoxious notice" was posted in shops in all parts of the country, and the men walked out. This notice required that molders should be compelled to work with helpers, or "bucks;" that their shop committees should cease to exist, and that the employers should determine the number of apprentices. At Troy there was also a question of equalizing prices.<sup>(b)</sup>

After an idleness varying from one to two months the employers' association was disrupted, the notices were withdrawn, and the molders returned to work.

An estimate, made by the president of the international union at the beginning of this year of the "great lockout," indicated that the local and international unions, since 1859, had expended \$1,161,582 in the support of strikes and lockouts, or an average per member of about \$24 per year.<sup>(c)</sup> At the end of the year the membership had

<sup>a</sup> Proceedings of the eighth annual session of the Iron Molders' International Union, 1867, page 6.

<sup>b</sup> The International Journal, May, 1866, page 62.

<sup>c</sup> Proceedings of the eighth annual session of the Iron Molders' International Union, 1867, page 10.



increased to 8,615, a gain of 1,300 during the year. As events showed, this was higher than any point reached during the following fifteen years.

The success of the union in the lockout of 1866 was of short duration. A period of falling prices ensued, and the inequality of molding prices in the several competitive districts forced the employers to take action. In view of the industrial depression the delegates to the national convention of the union in January, 1867, had agreed to a voluntary reduction of prices to 70 per cent in all cases where the advance had been 100 per cent above the rate of 1861. But several local unions refused to obey the instructions of their national president when he attempted to put this understanding in force. The issues are well shown in the following correspondence, carried on in February, 1867, between the president of the employers' association, at Cincinnati, and the president of the union.<sup>(a)</sup> The following notice was posted by the employers:

CINCINNATI, OHIO, *February 2, 1867.*

The past two years' experience having fully satisfied us that there is no reliance to be placed in the repeated promises made to us by the "Molders' Union Association" for the regulation and equalization of prices East and West, and that certain rules adhered to by each section of said union are operating to the decided injury of both employers and employees in the West; therefore,

*Resolved*, First. That from this date we will allow no dictation from said union; that we will pay only 40 per cent above old prices, instead of 100 per cent; this reduced price still exceeding prices paid in Buffalo, Albany, and Troy for similar work, these places coming into direct competition with us in sales.

Second. That we will at all times determine in connection with the foreman the prices that we will pay for new work not on the price list, adhering to the same rates as fixed for similar work, without dictation from any shop committee and we will be governed by our interests and judgment as to the character and number of apprentices we will employ.

W. R. RESOR, *President.*

S. R. BURTON, *Secretary.*

In view of this notice the Cincinnati union appointed a committee and asked for a conference. The following reply was received:

CINCINNATI, *February 3, 1867.*

Mr. WM. H. SYLVIS.

DEAR SIR: Your communication in regard to the difference between the Molders' Union and the employers, asking a conference has been received.

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<sup>a</sup> Proceedings of the tenth session of the Iron Molders' International Union, 1868, pages 7 to 9.



In a communication written to the Molders' Union January 19th, we fully stated the position we occupied, and owing to the low price of labor in the eastern cities and the facilities for transportation, we must either abandon the prospect of a remunerative and large stove business in the West, for the benefit of ourselves and our employees, and work against the competition that would not remunerate for the capital employed, or resist the oppression and endeavor to work outside the union sooner than sacrifice what we have invested.

You are fully aware that the difference in prices of molding is from 60 to 70 per cent higher here than at the points above mentioned, that come in direct competition with it. As a single example, we might mention that eastern stoves are sold in Columbus, Ohio, and other points near us, that defies competition from us, although the difference in our favor as to transportation is from 600 to 800 miles.

We believe the cost of living is as low or less here than in the East, and there is no reason why we should not be entitled to obtain our labor at the same price, and thus be enabled to compete successfully for the trade that legitimately belongs to the West.

We have repeatedly made the same statements by communications, and committees of conference of Union No. 3 and always with the same result, viz, a disbelief in our statements, and an increase of price.

The reply to our communication in January was an almost unanimous vote (as we are informed) that no reduction would be acceded to until they had time to equalize prices.

Having already defined our position fully in the preamble and resolutions unanimously adopted by us February 2, we see no good to arrive from a discussion from any committee.

Should your committee wish to submit any communication or proposition to us in writing, it will be received and respectfully considered and replied to.

STEPHEN R. BURTON, *Secretary*.

In answer to this the committee agreed to the following, which was adopted in a joint meeting of unions Nos. 3, 20, and 50, previous to being sent to the employers:

CINCINNATI, *February 12, 1867.*

S. R. BURTON, Esq., *Secretary*:

SIR: Your letter of the 8th instant, was duly received, and we will answer it as briefly as possible. You say the prices for labor should be the same in the West as in the East. We think a difference of 20 per cent between the East and the West should be no disadvantage to the employers of the West. Your argument as to the unfair competition at present we admit as true; rents in the East are at least 50 per cent less than in the West, while many of the necessities of life are higher in the West than in the East; and material (coal and iron) is cheaper in this city than in Albany, Troy, and other points East.

The statement you make both in your letter and in your printed circular, that the interest of the West demands an equalization of prices, we admit as correct; but when you say we have made no effort to effect such an equalization, we must differ. You will not fail to remember that, when we made an effort to raise wages in the East last spring, we were defeated as to a question of wages by your oppo-



sition. You, not us, are responsible for the present difference in wages. We beg leave to submit the following propositions:

First. The status of the union so far as your shops are concerned, shall be the same as before the present difficulty.

Second. We will work at 70 per cent above old prices.

Third. The committee on equalization appointed by the Boston convention, shall report on or before the first day of May next.

Should you decide to accept these propositions, please send reply to 479 Race street.

WM. H. SYLVIS, *Chairman.*

The following reply was received:

CINCINNATI, *February 13, 1867.*

MR. WM. H. SYLVIS,  
479 Race Street, City.

SIR: Your favor is received and contents carefully considered. We do not at this time wish to enter into particulars on the various speculations contained in your communication, as the first proposition determining the control of our shops and business by the society precludes the discussion of the communication in the other particulars.

STEPHEN R. BURTON, *Secretary.*

To this the following reply was returned:

CINCINNATI, *February 14, 1867.*

S. R. BURTON, Esq., *Secretary:*

SIR: The statement made in our communication of the 12th instant, were correct answers to the "speculations" contained in your favor of the 8th. We must again call your attention to the important fact, that the preamble to your printed circular of the 2d instant, is a misstatement—known to be such by you. In that preamble you say: "There is no reliance to be placed in the repeated promises made to us by the Molders' Union Association for the regulation and equalization of the prices East and West." At the beginning of last year we undertook to raise prices in the East. The work was begun in Troy. We wanted an equalization of prices, taking the highest shop as the standard, and an advance of 25 per cent upon the equalization. This would have given us an advance of 50 per cent in Troy. We were obliged to give up the advance because you made common cause with the Eastern employers in an attack upon the life of our organization. But for your opposition, prices would now be fully 50 per cent above the present standard in Troy and other points East, and you would have no cause for complaint. And in this case you have made a direct attack upon the union, and opened our eyes to the fact that a reduction of wages is not the question. You refuse to discuss the question of wages unless we abandon our organization. *This we will never do.* We are willing to go before the world upon such an issue, and the result will depend upon who can pound the longest. If there has ever been any imposition by shop committees, you had at all times the remedy in your own hands. A notice to the union would have corrected all abuses.

WM. H. SYLVIS,  
*Pes., I. M. I. U., Chairman.*



This closed the negotiations and was followed by the strikes and lockouts of 1867, which were more extensive and more bitterly fought than even those of 1866. At Pittsburg the strike lasted a year, and was won by the union, but elsewhere the unions were disastrously defeated and the national union was so weakened that for fifteen years it was unable to aid the locals effectually.

The effects of the strike of 1867 and the hard times that followed are seen in the great falling off of membership, which in 1870 stood only at 3,860.<sup>(a)</sup> Notwithstanding these adversities, there were a number of local strikes during these years, and when prosperous times returned in 1872 a still larger number of strikes for advances in wages took place. These lasted from one to nine weeks, resulting generally in compromised advances. Among the places where disputes occurred were Cleveland, Chicago, Toronto, Rome (Ga.), Louisville, Detroit, and the Ohio Valley shops. In the latter 2,000 men were involved for nine weeks. It was in this year that the National Stove Manufacturers' Association was organized. The molders, at their convention in July of the same year, adopted the following resolution addressed to the new association:

*Resolved*, That we congratulate the stove and hollow ware manufacturers of the country upon their success in organizing a society, having for its object the securing to its members of a just and equitable price for their wares, sufficient to fully compensate them for the capital invested, and the labor incident to making their business a success.

*Resolved*, That their efforts in that direction has our hearty sympathy, and, if necessary, will receive our hearty assistance.

*Resolved*, That while we fully recognize the rights of capital as represented by our employers, and believe their society well calculated to secure them those rights, yet we are unalterably fixed in our determination to resist by all lawful means any and every effort made to deprive the molder of his right to demand and receive a fair equivalent for his labor, or to abridge his right to fix a price for that labor.

In 1874 there were strikes against reductions of wages at Utica, Ottawa, Louisville, Rome (Ga.), Hamilton, Royersford, Covington, Rockville, Milwaukee, and Cleveland. In 1876 there were lockouts and strikes, mainly over reductions of wages, at Cleveland, Cincinnati, Covington, Louisville, Rome (Ga.), Troy, and Albany. The membership of the national union had increased to about 5,000. At the convention this year the molders brought forward the subject of arbitration, the matter being introduced by the president in his report, as follows:<sup>(b)</sup>

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<sup>b</sup> Proceedings of the sixteenth session of the Iron Molders' International 1870, page 18.

<sup>a</sup> Proceedings of the sixteenth session of the Iron Molders' International Union, 1876, page 8.



During the term we have fully realized the truth of the old saying that "it takes two to make a bargain." Our unions have invariably offered to submit every dispute as to wages to arbitration, in accordance with our laws, and almost as invariably have they been insultingly refused. In times past, we were denounced for refusing arbitration; but just as soon as we met the popular demand for a peaceful solution of trade difficulties, it was taken as an act of cowardice, and all our efforts to prevent strikes laughed to scorn. I recommend to the convention that it order a communication to be forwarded to the next meeting of the National Stove Manufacturers' Association, reciting our law on the subject of arbitration, and respectfully request them to pledge themselves individually and collectively to agree to submit all disputed questions about prices or wages to arbitration, and if they should refuse or decline to act on such suggestion, then it should be the duty of the executive of our organization to declare our arbitration law no longer binding on our unions or our members, leaving the matter entirely optional with each local union.

As the law now stands, it is too much in favor of the employer, as our members are obliged to ask for arbitration, which is a notice of an intention to strike, if refused, and such notice gives the employer time to prepare for such strike, and may possibly assist in our being defeated.

I am just as earnestly in favor of the principle of arbitration as I have ever been, but it would be folly for us to use it as a whip to beat ourselves. Our employers should be as deeply interested as ourselves, and if they are not, we should ignore the whole system, and act as they act.

The convention approved of the recommendation offered by the president, and after adjournment he forwarded to each local union an official circular, as follows:

(Official.)

#### ARBITRATION.

In accordance with the instructions of the Cleveland convention, each union will at once prepare a letter in the following form, and address a copy thereof to each and every employer of union molders—the letter to be under the seal of the local union, and signed by the president and recording secretary of such union. We desire the following form to be used, so that there may be uniformity in the matter, and no quibbling hereafter that the matter was not understood.

"Iron Molders' Union No. \_\_\_\_.

"\_\_\_\_\_, 1876.

"M\_\_\_\_\_.

"By direction of Iron Molders' Union No. —, the following is submitted for your consideration:

"Four years ago there was incorporated in our constitution an article making it compulsory on the union, in case of a difficulty with an employer in reference to prices or wages, to request of the employer that such difficulty be referred to arbitration; the arbitra-



tion committee to be appointed as follows: Two, (2) by the union, two (2) by the employer; these four (4) to choose a fifth; all five to be men of good character, and their decisions to be final.

"After four years of trial, we find that many employers ignore our efforts to settle such disputes in this way, and refuse to submit any such questions to arbitration, assigning numerous reasons for their refusal. We, however, were bound by our laws to ask for arbitration in every case, even when we knew it would be refused. In view of this fact, it has been decided to ask of every employer an answer to the following question:

"Will you, as an employer, agree that in the future all questions as to prices or wages, when in dispute shall be referred to an arbitration committee, in accordance with our laws?

"We are instructed to say that if you should decline to answer, or answer in the negative, that in the future we will not be bound to either offer or accept arbitration in case of a dispute between your firm and the molders in your employ.

"Hoping you will give us a favorable answer to the question, so that in the future we may avoid all difficulties on the question of wages or prices, we are

"Yours respectfully,

"\_\_\_\_\_, *Pres.*

"\_\_\_\_\_, *Rec. Sec.*"

I hope every union will at once prepare copies of the above and have them properly delivered to their respective employers, forwarding to this office the name of every employer or firm so addressed, and at the end of thirty days sending me the names of those firms that answer as well as those who do not answer. I want the list of firms to be full and complete, and each union is directly interested; for, after a reasonable time, strike circulars will only be issued in accordance with the record which each union forwards.

WM. SAFFIN, *Pres.*

Only a few replies to this communication were received, and the effort to secure arbitration on a shop basis was abandoned. As stated by Martin Fox twenty-five years later, "there was no association of employers with whom to enter into such a contract."<sup>(a)</sup> At the next convention, in 1878, the section relating to arbitration was struck from the constitution.<sup>(b)</sup>

The three years following these overtures toward arbitration saw the union reach the lowest point in its history. Unsuccessful strikes to resist reductions of wages occurred repeatedly at St. Louis, Louisville, Milwaukee, and Montreal. The president of the union was deposed at a special convention in 1879 for embezzlement, and the membership dropped off until it numbered in September of that year only 2,854.

The decade beginning 1880 shows a remarkable revival and aggressiveness on the part of the stove molders' unions, with many local

<sup>a</sup> Address, National Civic Federation Conference, December, 1901, page 158.

<sup>b</sup> Proceedings, 1878, pages 12, 49.



strikes and lockouts (and two general ones), frequently lasting several months, running as high as eighteen months in one case, and twelve to fourteen months in several cases. Not until after 1886 was the national union able to afford material assistance, and some of the most determined struggles were carried on by the locals involved, with such uncertain assistance as they could secure from outside. Even before industrial conditions improved there were strikes, in the latter part of 1879, won by local unions. At St. Louis 175 union and nonunion men were on strike at one shop four months against a reduction of 10 per cent. At Louisville all the shops were closed seven weeks on a demand for an advance of 15 per cent. In Montreal and Brockville there were strikes against reductions and discriminations. All of these were won by the strikers.

When business conditions improved the following year the molders made local demands for increases of wages, many of which were granted without strikes. In Cincinnati the foundrymen granted an advance of 10 per cent on April 1, and on May 5 they notified the molders that it would be taken off. The union went out on a strike for sixteen weeks and was successful. A strike of one week in Chicago against a reduction was successful, as were also a strike in Detroit of five weeks for a union shop, one in Pittsburg of four weeks for an advance, and one in Salem, Ohio, for an advance. There were also strikes at Philadelphia, Albany, Troy, St. Louis, Reading, Royersford, and Brockville, with varying results.

In 1881 there were several bitter and long-fought struggles. A strike for an advance at Erie lasting four weeks, one at Troy lasting one week, and one at Columbus lasting fifteen weeks, were won. At Rome, Ga., an eleven weeks' strike was lost. At St. Louis a strike of eleven months was lost; at Detroit a lockout and strike of one year was lost; at Louisville a strike for an advance of 15 per cent was lost after a long fight; and at Chicago a strike in one large foundry against a reduction of 20 per cent was won, but a second strike in the same shop, on a demand that the foreman be discharged, was lost after several months' duration. There were also disputes at Cincinnati and Brockton (Canada), while the molders at Quincy and St. Louis secured an advance of 15 per cent without a strike.

In 1882 there were strikes at Indianapolis, St. Louis, Keokuk, Peoria, Louisville, Troy, and London, some of which were lost and others won. In 1883 there was a large number of minor strikes in different parts of the country.

The year 1884 opened with one of the greatest strikes occurring under the jurisdiction of a single union. This was local No. 3, at Cincinnati, and all of the stove shops were closed nine months by a



strike against a reduction of 20 per cent. The strike was not supported by the national union and was lost at an expense of \$7,000 to the local. This strike spread through the Ohio Valley, involving altogether several thousand molders. It extended to St. Louis and to Pittsburg, but in these two localities the unions were successful. Shortly afterward the molders, to the number of 300, in all the stove foundries at Quincy struck against a reduction of 15 per cent, the prices then being 25 per cent advance on "board prices," and after one of the most severe struggles in the history of the trade, lasting six months, a compromise was effected on the basis of 12½ per cent reduction and union shops. In April a similar strike took place in one large foundry at Chicago, lasting five months, and was settled on a similar basis. At Buffalo a strike in one shop against a reduction was lost, while the locals at Troy and Albany accepted reductions without striking. The foundrymen of these two cities had organized an employers' association. The national union was unable to furnish assistance in any of these strikes, the treasurer having absconded with \$19,000 of the funds. The strikes of this year mark a turning point, for while the unions accepted reductions in wages they gained the union shop in several important establishments. A similar outcome followed several of the strikes in succeeding years.

The strikes and lockouts in Troy and in Albany during 1885 and 1886 show the retaliatory nature of the struggle during this period. In the spring of 1885 the unions in those places demanded a 15 per cent advance on the "board prices," which they had been compelled to accept the year before. After a lockout of a few weeks the demand was granted, although in one of the shops it was followed by a strike of 5 months on the "berkshire" issue, in which the union was defeated. In August the unions made another demand for 15 per cent, and after a short strike this also was granted. This restored the prices to the figures preceding the reduction in 1884. But the foundrymen had yielded only because of contracts on hand. They prepared to retaliate and in January, 1886, they declared a reduction of 20 per cent. The shops remained closed, and in March a compromise of 10 per cent was offered by the union and refused. Four months later, after a strike and lockout of seven months, the union accepted a reduction of 30 per cent, bringing them back to the "board prices" of 1885. The foundrymen at Troy made no effort to bring in strike breakers and the strike closed with union shops, but in Albany they remained open for a year or two longer.

Other strikes and lockouts during these two years were those at Rochester against a reduction of 12½ per cent, lasting three months and arbitrated; at Evansville, against 15 per cent reduction, lasting three weeks; at Quincy, against a reduction of 10 per cent, lasting two weeks and involving 175 men; at Pittsburg, lasting three weeks.



The strikes and lockouts of preceding years, wasteful and extensive as they were, culminated in 1887 in the greatest one in the history of the trade. This is known as the Bridge and Beach strike and lockout. Both forces to the controversy had been preparing themselves for a struggle on a national scale—the unions by securing union shops and strengthening their national finances, and the employers by organizing the Stove Founders' National Defense Association. This association of the employers was organized in 1886 as an offshoot of the National Association of Stove Manufacturers, which had existed since 1872. The older association had limited its activities to the commercial side of the industry. The new association was organized to deal with labor questions. It did not at that time and does not now include all of the membership of the Manufacturers' Association, and in order that the two subjects might be dealt with independently it was decided to organize the second association. The objects of the Defense Association are stated to be "resistance against any unjust demands of their workmen, and such other purposes as may from time to time prove or appear to be necessary for the benefit of the members thereof as employers of labor." The country was divided into four districts, as follows:

1. New England States.
2. The States of New York, New Jersey, that part of Pennsylvania east of the Alleghenies, Maryland, and Virginia.
3. The States of Ohio, Michigan, Indiana, Kentucky, Tennessee, West Virginia, that part of Pennsylvania west of the Alleghenies, and the territory south of the Ohio River.
4. Mississippi, Missouri, Kansas, Wisconsin, Minnesota, and the territory west of the Mississippi.

The membership includes manufacturers of cooking and heating stoves, ranges, and furnaces, with annual assessments in proportion to the maximum number of molders employed and an emergency fund of 10 cents per molder per month.

The members obligate themselves as follows:

1. Any unjust demands, made upon a member of said association by his workmen, or others, shall be resisted by the united action of all members in protecting said member upon whom such unjust demand shall be made.
2. We bind ourselves to obey the constitution, by-laws, and lawful regulations of said association.

The by-laws provide that the district committee "shall impartially hear grievances complained of by both members and his workmen, and shall equitably decide the same," but that the member shall have an appeal to the general executive committee of the association. If the committee decides in favor of a member and no satisfactory set-



tlement has been arrived at the committee may select either of these methods of defending the member:

1. Making such work as he may require.
2. Procuring men for him who will make such work in his shop.
3. Affording him compensation for loss of production.

A member is not permitted to resign during the existence of a strike or pending settlement of a difficulty between a member of the association and his men. He may be suspended by the president or expelled by a majority vote of the association for refusal or failure to comply with the requirements of the committees or officers or with the obligation of membership of the association.

For some time after the organization of the Defense Association its affairs were conducted with great secrecy, and it supported its members in strikes with the results already mentioned in 1886 and 1887. It was not until the Bridge and Beach strike of 1887 that the association felt called upon to extend its operations beyond local disputes and to bring on a general strike or lockout throughout the entire country. The progress and outcome of this strike was the turning point that led to the conference agreement four years later.

The molders in the employ of the Bridge and Beach Manufacturing Company, of St. Louis, went out on strike March 8, 1887, to support a demand for an increase of 10 per cent in the molding prices. The strike was sanctioned by the executive board, and the cause of the employer was taken up by the Defense Association. The patterns were sent to shops of other members in the same district to be made in obedience to the by-laws of the association. The molders in these shops at once refused to work on the patterns or to work in the shops while the patterns were present. The patterns were then moved into other districts, meeting with the same reception at all shops. Before they reached the second district the molders' executive board ordered those shops to work on the patterns, and asked for a conference with the executive council of the Defense Association. This was granted, but a settlement could not be agreed upon. The Defense Association then announced that the shops would close indefinitely, and what began as a series of strikes in the western districts ended as a lockout in the eastern districts. It became evident that the foundrymen had determined to attack the union at every point. Altogether about 5,000 molders were out of employment at St. Louis, Leavenworth, Louisville, Cincinnati, Quincy, Chicago, Detroit, Cleveland, Akron, Pittsburg, Newcastle, Rochester, Fulton, Troy, and Albany. This continued until June, when the patterns were recalled and the Bridge and Beach Company had their work done by nonunion molders furnished by the Defense Association. The molders at other points returned to work under conditions the same as those prevailing when they went out.



It is an interesting fact that both organizations claimed the victory in this great contest. The president of the Defense Association held that it "resulted in the complete triumph of our organization, although at large cost to us and to our members who were involved, and at incomputable cost to the Iron Molders' Union of North America." The molders claimed a victory because they considered that they had defeated an attempt to destroy their entire organization. As stated by a writer in the Iron Molders' Journal,<sup>(a)</sup> "Thus ended the greatest lockout in the history of our trade—ended in victory for us all along the lines, except only where it commenced." Whatever may be said as to the claims of victory, it is certain that each party was strongly impressed with the stability of the opposing organization. At the next convention of the union, in July, 1888, the president stated that the available funds in the treasury were \$30,000, and the secretary's figures showed that during the two years beginning July, 1886, there had been 7,535 initiations and reinstatements and 4,231 losses from suspensions, expulsions, and deaths, leaving a net gain in membership of 3,571.<sup>(b)</sup> On the side of the manufacturers there had also occurred a substantial gain, for the lockout had reduced the oversupply of stoves and made possible an advance in prices.

During the four years following the Bridge and Beach strike and lockout there were only four strikes in shops of members of the Stove Founders' National Defense Association supported by that organization, but there was a larger number in the shops of nonmembers. Among the latter were strikes in single shops at Utica for four months, against reduction in wages and losses through "dull iron," won by the union; at Pittsburg, for an advance in prices, lost; at Lehighton, Pa., for one year, against a reduction, won by the union; at Columbus, Ohio, against apprentices, lost; at Richmond, Va., lasting ten weeks, for an equalization of prices with other foundries, won; at Madison, Ind., against a reduction, won; at Danville, Pa., against apprentices, compromised; at Toronto, against low prices and "bucks," lost.

The strikes in shops of members of the Stove Founders' National Defense Association during the same time occurred as follows:

At Lawrenceburg, Ind., for a price book and against short wages. The firm was assisted by the Defense Association, but went into bankruptcy while the strike was in progress. At Albany a strike against a reduction of wages was successful and the reduction was withdrawn. At Rochester, N. Y., in February, 1890, a strike was lost and the firm continued as a nonunion establishment for several years. At Pittsburg the following August occurred the first strike, which was settled by the officers of the Stove Founders' National

<sup>a</sup> November, 1890, page 6.

<sup>b</sup> Proceedings, 1888, pages 18 to 20.



Defense Association in the form of a written agreement with the local union. The settlement was satisfactory to both sides, and made it quite plain that if an agreement could be made after a strike had been called and losses suffered, it would be possible to make just as satisfactory an agreement before the strike. How to bring about such an agreement was now a matter of frequent consultation between leading members of both organizations.

These consultations, in fact, had begun immediately following the Bridge and Beach strike. The president of the Defense Association at that time had proposed to the president of the Iron Molders' Union an agreement on a national scale, but the latter did not feel warranted in bringing the matter before his organization. At the molders' convention in July, 1888, a motion was introduced to appoint a committee to confer with a like committee of the Defense Association for the purpose of fixing a scale of prices, but this motion was laid on the table. Prior to the next convention, in 1890, however, the subject was frequently discussed unofficially, and the molders were given assurances that a request for a conference would be favorably considered by the employers' association. Accordingly such a motion was introduced and adopted as follows: (<sup>a</sup>)

*Resolved*, That the recommendation be amended so as to read that it shall be an instruction to the incoming executive board to communicate with the representatives of the Stove Manufacturers' Association with a view to holding a conference with them to discuss the points of difference between that body and the I. M. U. of N. A., and that at such conference the executive board be empowered to appoint a committee of three stove-plate molders to assist them in their deliberations, and that said committee be allowed \$4 a day and traveling expenses for the time they are in session.

In accordance with this resolution the executive board, at its first meeting, held in Cincinnati in October, 1890, appointed the committee of stove molders and sent an invitation to the secretary of the Defense Association asking for a joint conference. Thereupon the secretary forwarded to the members of the general board of the Stove Founders' National Defense Association the following communication:

*Member General Board, S. F. N. D. A.*

DEAR SIR: I inclose herewith a copy of the letter received during the past week from President Martin Fox of the Iron Molders' Union of North America, which explains itself. This is the first instance in the history of the I. M. U. in which they have sought a conference of this kind and it should receive careful consideration. Mr. Cribben thinks that, as a matter of courtesy, we should appoint a committee of conference to meet them and learn what plan of action they wish

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<sup>a</sup> Proceedings, 1890, page 69.



to pursue, and possibly something may result that will be to our mutual benefit and prevent the causes that lead to strikes. During the past few years they have been taught a very practical lesson, that it is useless for them to attempt to enforce unjust demands, particularly against members of the S. F. N. D. A., and they may be willing to treat with the association and more carefully consider the consequences arising from the enforcement of demands that can not be consistently granted.

As a member of the executive board, you are requested to carefully consider the matter referred to in the letter of Mr. Fox, and favor me with your views, and advise the best course for President Cribben to pursue.

Awaiting your favor, I am,

Very truly yours,

T. J. HOGAN, *Secretary.*

Favorable replies were received and arrangements were made for a conference, which took place as described below:

### THE FIRST CONFERENCE.

On March 25, 1891, representatives of both associations met in the city of Chicago, Ill. The following summary of the official minutes of the conference is given in the Iron Molders' Journal of March, 1891:

The committee representing the Stove Founders' National Defense Association was comprised of the following well-known gentlemen: Henry Cribben, president S. F. N. D. A., of Chicago, Ill.; D. M. Thomas, president N. A. S. M., Columbia, Pa.; C. H. Castle, Comstock-Castle Stove Co., Quincy, Ill.; W. T. Bussey, of Bussey & McLeod Stove Co., Chicago, Ill.; and T. J. Hogan, Chicago, Ill., secretary of the S. F. N. D. A.

The committee representing the I. M. U. of N. A. was: Martin Fox, president; John Campbell, of Quincy, member of the executive board; J. G. Galloway, of Union No. 45, Dayton, Ohio; Martin Monahan, of Union No. 8, Albany, N. Y.; and Patrick Enright, of Union No. 23, Chicago, Ill. The respective representatives met at the appointed time and date, at the Palmer House, Chicago, and organized for business by selecting Martin F. Monahan as chairman and T. J. Hogan secretary of the conference. The chairman opened the conference with a neat speech, in which the objects of the conference were explained as a preliminary step toward averting strikes and lockouts in the future.

Mr. Cribben stated that the meeting was the result of a correspondence between himself and the former president of the I. M. U. of N. A., Mr. P. F. Fitzpatrick, and that it was the first instance in the history of the iron-molders' organization whereby an effort had been made on a universal scale to arrange for an amicable settlement of future disputes.

General expression of approval was indulged in by all the members of the conference, with the hope that the meeting would result in good both to the employer and employee.



President Fox expressed himself highly pleased that the conference had taken place, and pledged himself to aid in bringing about a better feeling than had heretofore existed.

After some desultory remarks, Messrs. D. M. Thomas, J. G. Gallo-way, and T. J. Hogan were appointed as a committee to formulate an outline of the matters to be considered, during which time a recess was declared, at the expiration of which the following preamble and resolutions were presented:

Whereas there has heretofore existed a sentiment that the members of the Stove Founders' National Defense Association and the members of the Iron Molders' Union of North America were necessarily enemies, and, in consequence, a mutual dislike and distrust of each other and of their respective organizations has arisen, provoking and stimulating strife and ill will, resulting in severe pecuniary loss to both parties; now, this conference is held for the purpose of cultivating a more intimate knowledge of each other's persons, methods, aims, and objects, believing that thereby friendly regard and respect may be engendered, and such agreements reached as will dispel all inimical sentiments, prevent further strife, and promote the material and moral interests of all parties concerned: Therefore,

*Resolved*, That this meeting adopt the principle of arbitration in the settlement of any dispute between the members of the I. M. U. of N. A. and the members of the S. F. N. D. A.

This resolution was discussed at length, and adopted by a unanimous vote.

*Resolved*, That a conference committee be formed, consisting of six members, three of whom shall be stove molders appointed by the Iron Molders' Union of North America, and three persons appointed by the Stove Founders' National Defense Association, and to hold their offices from May 1st to April 30th each year.

Whenever there is a dispute between a member of the S. F. N. D. A. and the molders in his employ (when a majority of the latter are members of the I. M. U.), and it can not be settled amicably between them, it shall be referred to the presidents of the two associations before named, who shall themselves or by delegates give it due consideration. If they can not decide it satisfactorily to themselves, they may, by mutual agreement, summon the conference committee, to whom decision by a majority vote, shall be final and binding upon each party for the term of twelve months.

Pending adjudication by the presidents and conference committee, neither party to the dispute shall discontinue operations, but shall proceed with business in the ordinary manner. In case of a vacancy in the committee of conference, it shall be filled by the association originally nominating. No vote shall be taken except by a full committee or by an even number of each party.

The above resolution was the subject of lengthy discussion, and, as originally offered, was amended and adopted in its present form as a satisfactory rule to guide both parties in adjusting difficulties.

Mr. Patrick Enright was then added to the committee, which withdrew to formulate additional matter for the action of the conference, which, after a recess, again assembled, when the following was submitted, and after a protracted debate was unanimously adopted:

*Resolved*, Whereas the average term of a molder's productive capacity is found by statistical information, to be not more than four-



teen and a half years, and that the law of the I. M. U. restricting the proportion of apprentices to one to eight, with one for each shop, compels manufacturers by necessity to disregard such proportion and operate open shops in order to supply the demand; therefore, it is requisite that this question receive an immediate investigation, and readjustment upon a reasonable basis.

After discussion upon yearly agreements, equalization of prices, decreased profits of union-controlled foundries, etc., the following resolution was unanimously adopted:

*Resolved*, That the conference recommend to the I. M. U. of N. A. and the S. F. N. D. A. that they consider the desirability of annual agreements for the rate of wages.

Upon motion, the conference then adjourned, subject to a mutual call of the presidents hereafter.

The action of the conference was then submitted to both organizations for approval. In the case of the molders, a referendum vote was necessary, as the adoption of the second resolution required an amendment to their constitution.

As indicating the interest taken by representatives of both sides in securing favorable action on the part of the organizations they represented, we reproduce the circular sent out by the Stove Founders' National Defense Association and an open letter from Mr. J. G. Galloway, one of the molders' conferees, published in the Iron Molders' Journal, April, 1891.

SECRETARY'S OFFICE, 53 DEARBORN STREET,  
Chicago, Ills., March 28, 1891.

*To Members of the S. F. N. D. A.*

GENTLEMEN: At the annual meeting of June, 1889, the president, Mr. Henry Cribben, was authorized to appoint a committee to confer with a similar committee appointed by the Iron Molders' Union, whenever the latter should intimate a desire for an interchange of opinions.

At the recent triennial assembly of that union, held in Detroit, its executive committee was requested to take steps to cause a meeting with our representatives, and discuss such matters as would be conducive to the avoidance of strife and the development of peace and good will. The president of the I. M. U. appointed a committee, and the two bodies met here on Wednesday last, and continued in session Thursday and Friday.

Numerous matters were thoroughly discussed from the standpoint of both sides. I am pleased to say that our representatives were met with a fairness and reasonableness not often discovered among the labor representatives. We can take absolutely no exception to the views expressed by them in any particular as far as they apply to the relations between employer and employee, and they bound themselves, individually and collectively, to use their influence to conduct those relations justly, reasonably, and amicably.

Inclosed herewith I hand you minutes of the conference. The resolutions herein embodied do not go into effect until ratified by both organizations. The resolution providing for prevention of



strikes should be well considered, as it will be submitted to your next convention for ratification.

I trust that you will approve of the action of your representatives. They have done all that appeared to them feasible at the present time, and have cleared the way for further beneficial action.

Very truly yours,

THOS. J. HOGAN, *Secretary*.

Mr. Galloway's letter, addressed to the molders, is as follows:

DAYTON, OHIO, *April 12, 1891.*

*Editor Journal:*

A remarkable thing in the history of labor organizations has occurred:

A conference between those who have been regarded by economic writers as master and man in the organization of the manual toilers during the centuries of the past! The fact that such a meeting could take place, that the representatives on both sides gave their opinions in straight language, based upon the fundamental principles underlying the question of production and distribution, in a broader sense than that pertaining to a single division of the production of wealth, and that each received and weighed the argument of the other, in an honest effort to arrive at some reasonable and amicable basis of action in our own branch of industry, by which the wasteful practices of the past may be avoided in the future, and the very greatest beneficial results to both secured, proves that organization has, through the medium of strength and intelligence, arrived at the age of respectful recognition.

There could be no fairer treatment accorded by one set of men to another set of men than that which seemed to govern the committee of the manufacturers' association. No question was raised that was not candidly and fully ventilated, and reasonably harmonious conclusion arrived at. It was fully realized by the ten gentlemen present that there was a marvelous idea in embryo for future good, if both sides were governed by ordinary intelligence and honesty of purpose in the initiation of the plan for unity and harmony.

There could be no fuller indication of the disappearance of the old idea that the workers constituted a class that the employers were under no obligation to respect, and it now rests with the members of the I. M. U. of N. A. to carry to a complete realization the query in the preamble to our constitution: "What positions are we, the mechanics of America, to hold in society?"

The Stove Founders' National Defense Association is the logical sequence of perverted economic truths. The employers are legitimate producers and as much oppressed by the appropriators and accumulators as the employees under them, and they have found it easier to press upon their workmen than to resist the pressure that was operating against them.

This naturally produced resistance on the part of their workmen, and now we have the full fruition of this erroneous system to face. It is true that man seeks to gratify his wants with the least resistance. Mutual interests ought to make one harmonious whole of the employer and employee in every branch of industry. A "fair, full, and



candid " consideration of the systems that compel the producers of wealth to yield up the greater part of their product for the mere privilege of producing, by the whole body of producers, will soon secure and practically answer the other query in conjunction to this: "Are we to receive an equivalent for our labor, to maintain us in comparative independence and respectability?" Brothers, take it into your unions, discuss it honestly, candidly, without prejudice, and there will be no fear of the result.

J. G. GALLOWAY.

The convention of the Stove Founders' National Defense Association, held in May of the same year, approved of the action taken by their conferees and adopted the resolutions. On the molders' part, 144 local unions voted in favor of the resolution, 13 against it; on the constitutional amendment, 131 in favor, 22 against. The clause of the union's constitution which was amended is here reproduced, the additions being in italics, the omissions in brackets:

When a difficulty occurs under the jurisdiction of any local union through a reduction of wages, or through the principles of the organization being jeopardized in any manner, or should any local union desire to make a demand for an increase of wages, the union under whose jurisdiction the trouble exists shall hold a meeting at once to consider the same. They shall take a secret ballot to determine whether to accept or reject such reduction in wages, or make a demand for an increase in wages, or whether the union shall or shall not insist upon the enforcement of said union principles. It shall take a three-fourths vote of all the members present to decide: no member being allowed to vote on said question who has not been a continuous member of said union for at least three months previous to the date of said meeting. If, in the judgment of the union, they shall decide to reject said reduction, or insist upon the enforcement of said union principles, or make a demand for an increase of wages [said demand being refused] *the members involved shall remain at work and* the union shall cause to be issued and sent to the president a bill of grievance stating the nature of the trouble and the action of the union thereon. The president, immediately on receipt of said grievance, shall [send a copy to each member of the executive board, and shall] personally or by deputy proceed to the place of difficulty to investigate the cause of the trouble, and, if possible, effect a settlement, *failing to adjust which, he shall cause to be sent to each member of the executive board a copy of the grievance.* While said grievance is pending it shall be considered a violation of union principles and laws of the organization for any member to go to work in said shop *who was not employed therein at the time and previous to the difficulty*, for which violation he or they may be fined, suspended or expelled. Upon receipt of the decision of the executive board, the president shall immediately notify the union as to the result, and should the grievance *receive or fail to receive* their sanction, the union shall hold a meeting and [declare the strike off] be governed accordingly. After notice is given that their grievance is not sanctioned, should the union decide to strike, it may be considered sufficient provocation for suspension from the rights and privileges of the I. M. U. of N. A., at the option of the president and executive board. Mem-



bers out on authorized strikes shall receive the following sums per week: Single men, \$5 per week;<sup>a</sup> married men and single men with others depending upon them for support, \$7 per week. The secretary shall keep the organization informed by circular as to the progress of all strikes or lockouts.

The practical results of the first conference are to be found in the method by which both associations decided to take up for adjustment the differences which might arise between the foundrymen and the molders in their employ. Some of the molders' representatives had favored the method of simple arbitration; that is, the presence of a third party, whose decision would be final. This method appeared unsatisfactory to the foundrymen, and, while they favored the spirit and principle of arbitration, they suggested that better and more satisfactory results would follow from the decisions of a joint committee composed of foundrymen and molders in equal numbers on each side. Experience has indicated that their judgment was sound and practical.

The arguments by which the foundrymen defended their position on the method by which adjustments were to be reached are clearly set forth by Mr. Chauncey H. Castle, president of the Stove Founders' National Defense Association, in a paper read before the conference of the National Civic Federation in Chicago, Ill., 1900. Touching upon this subject, he said:

During a session of three days a plan for the consideration and adjustment of grievances, which was called "arbitration," but which may more properly be called "conciliation," was unanimously agreed upon by the ten representatives, and was approved of and ratified by the respective organizations. The representatives of the molders urged the strict arbitration plan, and as the word has a meaning of justice and fairness, our representatives, in general, were disposed to favorably entertain it. However, some of our representatives contended strenuously that our members could not properly, and therefore would not, enter into an agreement that would obligate them in advance to submit important questions affecting their business to the decision of an odd and disinterested man, who had no knowledge of their business and its requirements, and who might be biased. The arguments upon this question of arbitration were earnest and extended. It was contended—

First. That the odd man, who was disinterested, and who would probably have no knowledge of the business, would be alone responsible, for the reason that the representatives of neither party would be liable to concede, even if convinced, for those he represented would expect him to win through the odd man, if possible. The question was asked of one who was most strenuous for arbitration; "Would you, if a member of an arbitration committee, representing your side, concede anything of importance, even if you became convinced it was

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<sup>a</sup> The convention of 1899 advanced the rate to single men to \$7.



right to do so?" And his reply was, "No; I should feel obliged to win, if possible, through the odd man."

Second. That it would be extremely difficult to secure the services, in each case, of such a man as would be needed, and who would be acceptable to both parties, because few such men would be willing to serve, even when agreed upon, as the position would not be a desirable one, to a really good and competent man.

Third. Should an agreement to arbitrate be made, issues would multiply and some of the demands would be extreme, unjust, and even ridiculous. Such issues would be made, however, only because there would be a chance to gain through the odd man, while there could not possibly be a loss.

Fourth. The employer could not expect to stand an even chance with the employee, aside from the merits of the question, in an average of a number of arbitrations, because of the facts, that public sympathy is always with the workmen, that they have many votes, that they have large patronage to bestow upon every business and profession, and that they do not hesitate to exert to the utmost in such matters such influence as accompanies these conditions. So that, at any rate, if in doubt, the arbiter, being inexperienced and without knowledge of the business, would be likely to incline to favor the employee.

For these reasons it was not reasonable to expect our members to be willing to accept such an arrangement. In other words, they would not be willing to submit an important question, largely affecting their business interests, to the casting up of a chip, "wet or dry," with a large majority of the chances in favor of its falling "wet" side up if their representative selected "dry." If the award was unjust to employees they would not work under it, and if such as would operate to the ruin of the business of the employer he could not long abide by it.

It was urged that it were far better to submit any issue to a committee, composed of an equal number of the representatives of the molders and of the manufacturers, as a last resort, each of whom had a knowledge of and an interest in the business, who should strenuously strive to reach an agreement, understanding that in case of their failure to do so an open rupture and bitter contest must be the result.

Consideration was also given to avoiding, to the extent that might be possible, the inconvenience and expense of calling upon such a conference committee. It was agreed that employers and employees, who were directly affected, ought, in each case, locally, to make special efforts themselves to settle any disagreement, and that, failing to do so, either or both might send a statement of grievances to the officers of their general organizations, and that then the presidents should make investigation and try to adjust the dispute before the conference committee should be called.<sup>(a)</sup>

The joint action taken by the first two conferences was submitted to the respective organizations for approval before it became operative. The foundrymen took action at their annual convention in

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<sup>a</sup> National Conference on Industrial Conciliation, National Civic Federation, New York, 1902, pages 179-182.



May and the molders resorted to the referendum vote. Since 1892 every action, with one exception, taken by the joint conference has been binding upon the respective membership without further reference. The exception was the action taken in reference to the ratio of apprentices at the conference held in Chicago March, 1905, the resolution on this subject being held inoperative until acted upon by the Stove Founders' National Defense Association at its annual convention.

### ENFORCING THE AGREEMENTS.

It will be seen that the resolutions adopted at the first conference in 1891 and accepted by both organizations created a new form of government for the stove industry, with legislative, judicial, and executive powers. Before reviewing the work of the succeeding conferences, it will be well to examine the constitution and procedure here for the first time put into effect.

Representatives to the annual conferences are elected at the conventions of the respective organizations, the administrative council or executive board of each association having power to fill vacancies. On both sides they come with full power to act and to bind their constituents upon the question of the wage rate or amount of percentage to be paid on "board" or piece prices.

These joint conferences are purely legislative in character. No local grievance can be taken up for consideration or adjustment. Neither do the conferences discuss abstract questions of the rights or obligations of either side. The time is devoted to the discussion and adoption of resolutions, or, as they may be more properly termed, laws to govern the actions of employers and employees in the shops. These resolutions are general in character and binding upon all members of the respective organizations.

When a dispute arises in any of the foundries represented in the employers' association it is the first duty of those concerned to effect a settlement if possible. If this is found impossible it is the duty of one or the other party to refer the dispute to his national president or secretary, who in turn notifies the other association that there is a question which has arisen and been referred to the national officers for adjustment. Both presidents or their deputies, the deputy in each instance being a national officer of his organization, thereupon meet at the foundry where the difference has arisen, and, after considering the case, they reach an adjustment of the matter in harmony with the provisions and specifications of the conference agreements. This action of the two representatives is binding upon both parties, and their decision is supported by the membership of both organizations.



Should one of the parties affected decline to abide by the decision, feeling that an injustice had been done, he has a right of appeal to what is termed the "conference committee," composed of three members from each association. This special committee, however, has never played a prominent part, as all disputes arising during the past fifteen years, with one exception, have been adjusted by the two presidents or their deputies when they met. The exception just mentioned throws a clear light upon the manner in which discipline is maintained and enforced by both organizations.

In 1892, one year after the first conference, a member of the Stove Founders' National Defense Association, whose foundry was situated in Marietta, Ohio, demanded a 10 per cent reduction in wages. This the molders declined to accept, and the matter was referred. The representatives of both associations met at the foundry, and, after investigating the circumstances, decided that the reduction was unwarranted. This action was not acceptable to the firm and it appealed from the decision. The matter was then referred to the conference committee. This body met in July of the same year, and, after deliberating on the question, unanimously reaffirmed the decision previously reached. A few months later the firm placed the reduction in force, contrary to the findings of the conference committee. After this action, the firm was dropped from membership by the Stove Founders' National Defense Association, and the molders' union went on strike in the shop. Of course, no objection to this action was made by the foundrymen's association. This was the only instance in the history of the agreement system when the conference committee was called together, and the only instance when the extreme penalty was inflicted on any member for violating the agreement.

Another case will show the procedure on the part of the molders. Since the constitution of the Iron Molders' Union of North America, already quoted, provides that any local union or the members thereof may be suspended from membership for striking without the sanction of the executive board, the officers have the means within their hands of enforcing discipline. In 1903 the molders of Troy, N. Y., struck in one of the foundries operated by a member of the Stove Founders' National Defense Association, which action was contrary to the agreements. Upon their refusal to return to work on the order of the president of the national union, their union was promptly suspended, although it had been in good standing since 1859. This action of the national officers had the desired effect, and the molder immediately returned to work.



## ADJUSTMENT OF PIECE AND STOVE PRICES.

When the first national joint conference between the two associations had adjourned, both organizations were officially committed to the principle of conciliation. The action taken by the members of both bodies in approving the work of any conference placed ample power and authority in the hands of the respective presidents. These gentlemen and their official associates were prepared to test the value of the newly adopted methods in any and every dispute which might arise in the stove industry.

At this period there was a wide range in the prices that were being paid for stove molding. Not only was there an absence of equality in the molding price on different stoves in the same foundry, but the prices paid for similar work made in separate foundries were subject to inequalities, at times amounting to 40 per cent of the total price. Many disputes on various questions were taken up and adjusted during the early years of the conference agreements. By far the most important one that arose between 1891 and 1898, however, was that of the molding price, both as it was applied to the piece or "board" and to the total or stove price. Up to the year 1891 each foundryman had endeavored to secure as low a molding price as possible. If his molding price was lower than that paid by his competitors, it apparently gave him an advantage in the open market. Whenever he placed a new set of patterns in the foundry every effort was made to set the lowest molding price possible. There were two periods in the year, midsummer and midwinter, when it was customary to close the foundry for from one to two months, as this was the period between seasons. If the foundryman desired to force a low price on a new stove, the patterns would not be sent to the foundry until the closing-down period had arrived. While the shop was closed the molders would be shown the new patterns and notified of the molding price the firm was willing to pay. A refusal on the molders' part to accept these would generally lead to a statement that the shop would remain closed until they were willing to accept them, and on many occasions an extremely low molding price was secured under these circumstances. Again, when a strike occurred and was lost the foundryman changed the former prices, and when union molders returned they were forced to work for lower piece prices. It would happen also that the foundrymen waited until periods of depression had arrived before setting a new molding price. Conversely, when trade was brisk and the conditions favorable, the molders would succeed in forcing a higher price on certain pieces or upon an entire set of stoves. As these conditions had prevailed from the time that the industry had its beginning in this country,



it becomes evident that the molding prices were far from equal on similar work made in the same shop and district.

From 1891 to 1898 the questions arising from the inequality of molding prices occupied more time and attention on the part of both foundryman and molder than any other point of difference. Before this period a shop or district might enjoy considerable advantage arising from its lower molding cost. The policy of both associations was now to remove these inequalities, which was done when the occasion arose, by advancing or reducing the individual molding price on a piece or "board," or placing a new price upon the entire stove or line of stoves. By far the greater number of changes were in the form of an advanced "board price," and but seldom was a former price reduced. In reaching a decision on a price in dispute the representatives of the two associations were guided by other prices paid for similar work made in the shop or district, as provided for in clauses 4, 5, 6, and 7 of the conference agreements adopted at the annual joint conference held in Chicago, February 24, 25, and 26, 1892. They were as follows:

The present established price of work in any shop should be the basis for the determination of the price of new work of similar character and grade.

When new work of a character or grade different from that previously made be introduced into a shop, the basis of price should be the average paid for goods of similar grade or character by competitive foundries. "Competitors" or "competitive foundries," as applied to stove manufacturers, are firms disposing of goods of similar grade in the same market, and not necessarily firms manufacturing in the same district.

Any existing inequality in present prices of molding in a foundry or between two or more foundries should be adjusted as soon as practicable upon the basis set forth in the foregoing paragraphs, by mutual agreement or by the decision of the adjustment committees provided by the conference of March, 1891.

Whenever by improved appliances, new or different methods, or superior facilities introduced by the manufacturers, an increase in the quantity of work produced can be made, the price of molding may be decreased proportionately: Provided that the new price shall not reduce the average wages of the molder who makes it.

While these clauses are self-explanatory, it is of interest to become acquainted with the method by which they are carried into effect when a disputed stove price is adjusted by the officers of the two associations. After visiting the foundry together and examining the stove the price of which is in dispute, they select another stove of similar size, style, and construction, made in the district, whose molding price has already been set and accepted by both the foundryman and the molders and recognized as a standard. This stove is taken apart, piece by piece, and laid out on the floor. The stove to



be priced is then compared, piece by piece, the patterns of each stove being placed side by side, and a price is set upon them that will correspond with the prices paid for the stove selected for comparison, due allowance being made for the differences in the individual patterns so far as the labor required to mold them is concerned. By this method guess work is eliminated and a practical rule is applied which meets every requirement. The officers on both sides who give this work their attention have become experts, and their findings are generally accepted without question by the parties affected. Though dissatisfaction may at times find expression from one side or the other, the prices they set are enforced, and there have been no appeals to the conference committee so far as this question is concerned.

### PERCENTAGE.

The foregoing refers to the piece or total molding price of a stove, range, or heater. In addition to the piece price, there is paid a percentage, and the amount of this percentage regulates any advance or reduction in wages which may be agreed upon in the annual joint conferences. The rate of percentage prevails for twelve months, terminating March 30 of each year.

It was a recognized principle after the first annual conference that the percentage agreed upon should prevail in every foundry operated by members of the Stove Founders' National Defense Association. At the annual conference held in February, 1892, the following clause was adopted:

The general rate of molders' wages should be established for each year without change.

At this time some foundrymen were paying percentages varying in amount according to the locality and the conditions which had existed in their foundry in the past. This situation was always taken into account by the representatives of both associations when adjusting prices which could not be agreed upon by the local foundrymen and molders, so that, in effect, their findings established a flat "board price" or its equivalent. This was done as already described under the preceding heading. When, however, a general change in prices is made by the conference committee, it is done by applying a certain percentage to the equalized "board prices." The changes in this percentage is the topic now to be considered.

At the conference held in April, 1893, the conferees of the molders requested an advance of 15 per cent, claiming that business for 1892 was exceptionally good everywhere, that stocks were light, and that the foundries had opened earlier than usual. The molders explained that they made the request first of the Stove Founders' National



Defense Association, knowing that as an organized body it could act more quickly and effectively, and that if granted by its members a similar advance would be conceded at once by every other manufacturer, especially by those running open and nonunion shops. They claimed that molders' wages were lower than those of other operatives relative to the character of the work, the skill required, and the labor expended, and that the present was a most favorable opportunity for advancing the price of stoves because of the large demand, small supply, light stocks, and scarcity of efficient workmen. The foundrymen, on the other hand, took the ground that there were menacing clouds on the financial horizon that predicated a serious condition of affairs, that competition was never more keen or more grinding, and that the course most advisable for the molders to pursue was to obtain first the consent to an advance of those manufacturers who were not members of the Stove Founders' National Defense Association and who were paying low rates of wages and selling goods at inordinately low prices, and then the Stove Founders' National Defense Association would gladly concede the advance. They said, too, that when business warranted it and they had one or two years of prosperous times they would willingly grant an advance. Everything turned out as the manufacturers predicted, and the fall of 1893 was the worst in the stove business that was ever known. The meeting was adjourned until June, by which time the financial panic became evident, and the request for an advance was not pressed. In fact, the prospect of reductions in wages and prices by manufacturers not members of the association had become a serious matter. On this representation from the foundrymen the molders' executive board, having full power and authority to act, agreed that should a sufficient number of stove manufacturers—not members—controlling 5 per cent of the output of stoves secure a reduction, the same would be granted to all members of the Stove Founders' National Defense Association. With this understanding, it was agreed that the foundrymen would pay the same molding prices for the coming year as had prevailed during 1892. A few foundrymen, not members of the association, were able to force reductions, but this number never reached 5 per cent. This agreement was continued for the five successive years, and as a result the stove industry weathered the depression with less loss than other lines of manufacturing. Furthermore, it avoided the industrial friction manifested everywhere when trade improved and the wage-earners demanded a return of the wages they had formerly received.

The results of the year's experiment in 1893 were generally satisfactory, so much so that in 1894 no request for a conference was made by either side and the agreement on the wage rate for the pre-



ceding year was continued. In 1895, however, a request for a conference came from the foundrymen, as a problem had arisen which required immediate action. It was the national executive board instead of the conference committee to which the request was advanced and which met the association's representatives. It had developed that the largest manufacturer of round oak heaters, the Round Oak Stove Works, of Dowagiac, Mich., had notified the trade that they were prepared to cut their former selling price 10 per cent. As this firm was not a member of the association, it was not governed by the conference agreements, and had already reduced its molding prices. This action brought on a brief strike. Unless something could be done which would prevent the reduction from continuing, the prices of molding on this line of stoves would have to be reduced generally or the members of the Stove Founders' National Defense Association manufacturing this line would be driven from the market. The molders' representatives were prepared to face the issue, and agreed that should this firm maintain the reduction they would grant a 10 per cent reduction on this line of stoves throughout the country. After this conference had adjourned one of the molders' national officers met the members of the firm in question and advised them that should the reduction in their foundry continue the molders would accept a reduction on similar stoves made by other foundrymen. As such a step would remove the advantage they had secured by a lower molding price, they reconsidered their action, and their former molding prices were restored, thus bringing the strike to a close.

This step was looked upon by the entire stove industry as one of the greatest importance. An indication of this will be seen in the following editorial which appeared in one of the most prominent trade papers, the *Metal Worker*:

The entire stove trade is interested in the news sent out from Dowagiac, Mich. The strike in the Round Oak Stove Works has been settled, the manufacturers agreeing to restore the former schedule of wages. It is not often that labor troubles in a single establishment assume so much importance as in this case, but the circumstances have been peculiar. Much depended upon the outcome of the strike at Dowagiac. Usually the sympathies of other manufacturers are with an establishment having a strike on its hands. Help is often extended, and in many other ways encouragement is given, for other employers are apt to feel that they may at some time be involved in a labor trouble themselves and may need the active cooperation of their colleagues. But the strike at Dowagiac was not regarded from the usual standpoint. A cut in workmen's wages had been made in contravention of the policy of the National Association of Stove Manufacturers, the reasons for which have frequently been set forth in these columns. A simultaneous reduction in the price of oak stoves was announced, which was also not in conformity



with the policy of the associated manufacturers. They preferred to maintain the price of stoves and pay their workmen the same rate of wages as was paid when times were good, believing that no more stoves would be sold in the aggregate even if prices were cut. The Round Oak Stove Works proposed to try the other policy.

At a conference recently held in Chicago between representatives of the Stove Founders' National Defense Association and the Molders' Union, an agreement is said to have been reached by which the manufacturers of oak stoves belonging to that association were to be favored with the same reduction in wages as that made at Dowagiac. If, however, the old rate of wages should be restored at Dowagiac, no cut was to be made by the manufacturers referred to. The officers of the Molders' Union were of course very anxious to keep up their members' wages, and from that time made every effort to secure a change in the policy of the managers of the Round Oak Stove Works. That they had succeeded is shown by the news sent out from Dowagiac on Tuesday. It is to the credit of the Round Oak Stove Works that the managers have not decided to obstinately adhere to the course which they had marked out for themselves. Had they steadfastly determined not to listen to the appeals of outsiders, but to press the reduction in wages and in the selling price of their stoves, a reduction would shortly have been made in competing establishments which would very probably have spread to other classes of stoves, seriously unsettling matters all along the line. As it is, wages will be maintained at the old standard in stove foundries, prices of stoves will not be demoralized, and members of the trade in general will continue to know precisely where they stand. It is a source of satisfaction to know that a most irritating question was thus satisfactorily settled.<sup>(a)</sup>

By mutual consent no change was made in the wage rate at the conference of 1896, and the year following no conference was deemed necessary. The same understanding was continued respecting a possible cut in wages by outsiders, and in 1898 this was put in the form of an agreement, as follows:<sup>(b)</sup>

CHICAGO, *April 14, 1898.*

We, the president and secretary of the Iron Molders' Union of North America, acting under the instructions of the executive board of that organization, do hereby enter into the following agreement with the officers of the Stove Founders' National Defense Association, which shall remain in force during the year ending March 31, 1899:

First. That, in consideration of the molding prices of 1897 being maintained by the members of the Stove Founders' National Defense Association during the year ending March 31, 1899, the executive board of the Iron Molders' Union of North America have the power to, and will prevent their members from accepting any reduction.

Second. The representatives of the Stove Founders' National Defense Association accept these assurances as satisfactory, and agree that the wage scale and prices paid for molding stove plate during 1897, shall be in force during the year ending March 31, 1899.

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<sup>a</sup> Quoted from Iron Molders' Journal, May, 1895, page 7.

<sup>b</sup> Iron Molders' Journal, May, 1898, page 214.



Third. In case of failure of the executive board of the I. M. U. of N. A., to effectually carry out their assurances as given above, and a reduction in wages be effected by manufacturers not members of the Stove Founders' National Defense Association, employing five per cent of the union stove-plate molders of the district of the Defense Association in which said reduction has taken place, then another conference between the two bodies hereunder represented shall be held within fifteen days of notice given by either side; and, if no alternative be found, then the said executive board of the Iron Molders' Union of North America, shall consent to and accomplish a similar reduction by the union men employed by members of the Stove Founders' National Defense Association; provided, however, that the percentage as stated above, shall not include the molders of any members of the Defense Association who may effect a reduction.

Signed, on behalf of the Iron Molders' Union of North America,

MARTIN FOX, *President*.

E. J. DENNEY, *Secretary*.

Signed, on behalf of the Stove Founders' National Defense Association,

C. H. CASTLE, *President*.

THOS. J. HOGAN, *Secretary*.

It did not become necessary to call a conference to meet the competition of outsiders, as contemplated in the foregoing agreement, and consequently there were no reductions in molders' prices during the entire period of the depression. In effect, flat "board prices" were paid from the date of the first conference in 1891 until the spring of 1899, when a 10 per cent advance was granted. In 1900 an additional 5 per cent was given, and in 1902 another 5 per cent was added, making in all 20 per cent on "board prices." This rate of percentage was not changed in 1903, 1904, or 1905, and is in force at the present time. The same percentage advances have in almost every instance been given by the stove manufacturers not members of the Stove Founders' National Defense Association.

### APPRENTICES.

There is probably no trade union in this country which has made greater efforts than the Iron Molders' Union of North America to establish and maintain a ratio of apprentices. From the time of its birth it has by constitutional provisions endeavored to limit the number of apprentices, and numerous strikes have taken place to enforce the ratio it had adopted. When the molders in any stove foundry became members of the union their first efforts, after the questions of piece prices and percentages had received attention, were directed toward regulating the number of apprentices to be employed in accordance with their laws. It also happened at times that this question was the first one to be taken up with the employer.



From the molders' point of view, the question was of the utmost importance. The larger the number of apprentices employed the smaller the number of journeymen at work. As the apprentice was paid by the piece, but at a lower percentage than that paid to the journeyman, the proportion of apprentices employed played a prominent part in the cost of production. The molders were often reminded of this fact by those foundrymen who were restricted to the union ratio, and they frequently demanded that they should be placed on a level with their competitors in this respect. The molders, however, clung tenaciously to every vantage ground they secured, and endeavored to enforce their ratio universally.

From 1859 to 1867 the ratio of apprentices was one to the shop, irrespective of the number of men employed, and one to every ten journeymen in addition.

It is impossible to discover the reasons which led the molders to adopt this proportion of apprentices to journeymen, though there are ample indications that the result was not reached through the collection of statistics. In all probability no one had endeavored to work out the number of apprentices required to maintain the supply of journeymen and to meet the requirements of a growing industry. The ratio of one to ten was doubtless adopted for no other reason than that it met the approval of the majority of delegates. When their great leader, William H. Sylvis, became president of the national union, efforts were made to gather statistics that would enable him to form some accurate conclusions on this question. It had at that time become one of the most prolific causes of friction. As indicating this condition and also the advanced views held by Mr. Sylvis on this question, an extract from his report made at the Boston convention in 1867 is given. He said:

The apprentice question is one that has given us more trouble than all others combined. I have stated, in my previous reports, that I did not believe our present law to be based upon principles of justice, either to ourselves or our employers. It is said by some that we are not called upon to legislate for the interests of our employers. With such I do not agree. I would not do anything that would take from our employers a single legitimate right, or in any way cripple their business. This I consider the correct view and the duty of all.

In all my dealings upon this vexed question I have been looking to such an understanding between the two parties concerned as would result in the adoption of such a system as would give satisfaction to all parties.

During the past year I have been in communication with employers in several parts of the country, and several have expressed a desire to have a joint convention of representatives from employers and molders, with the view of arriving at some general understanding that would give equal protection and satisfaction to all parties. I have given every encouragement to this idea, and have, upon all



occasions, expressed myself freely in favor of such a convention, and have uniformly said that if the employers of the country would agree to faithfully carry out whatever system should be fixed upon in such a convention, I would favor the alteration of our law so as to make it one apprentice to five journeymen. It would make no more molders than the increase in the foundry business demands, besides having the great advantage of making a much larger proportion of good workmen.<sup>(a)</sup>

The views of Mr. Sylvis, however, were far in advance of those held by the members. They were at that time unwilling to adopt a ratio of one to five, even though the foundrymen as a body should agree not to exceed that number. The only action taken by the convention of 1867 was to raise the ratio from one to ten to one to eight, and this ratio has remained in their constitution to the present day.

Many foundrymen agreed to this ratio for the purpose of avoiding open rupture with their molders. As the latter were never able to enforce their regulation generally, bitter feeling was engendered and arbitrary methods were resorted to on both sides. In many localities this question would be the only source of discord. The piece prices and percentages in all of the stove foundries might be on a par, but some foundries would be limited to the one-to-eight ratio, while others would employ a much larger number of apprentices. This difference arose through the molders' inability to force certain foundrymen to submit to their ratio.

At the first conference held between the Stove Founders' National Defense Association and the Iron Molders' Union of North America the ratio of apprentices was not referred to, but when they again met, in 1892, the subject came up for consideration. The following resolution relative to apprentices was adopted and recommended for favorable action to the membership of both associations:

*Resolved*, That in the opinion of this conference, the following principles should be incorporated in an agreement between the S. F. N. D. A. and the I. M. U. of N. A. applicable to all members of the former working in harmony with the Molders' Union:

1. As reliable statistics demonstrate the average duration of a journeyman molder's continuance at his trade to be less than sixteen years, it is necessary, in order to maintain a proper supply of competent workmen, that one apprentice be employed to every six journeymen, or one for every seven floors operated.

2. Apprentices should be given every opportunity to learn all the details in the trade thoroughly, and should be required to serve four years. Any apprentice leaving his employer before the termination of his apprenticeship should not be permitted to work in any foundry under the jurisdiction of the I. M. U. of N. A., but should be required to return to his employer. An apprentice should not be admitted to membership in the I. M. U. of N. A. until he has served his apprenticeship and is competent to command the average wages.

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<sup>a</sup> Iron Molders' Journal, November, 1904, pages 828, 829.



3. Each apprentice in the last year of his apprenticeship should be given a floor between two journeymen molders, and they, with the foreman, should pay special attention to his mechanical education in all classes of work.<sup>(a)</sup>

Clause 1 of the above resolution would have meant the virtual recognition of a ratio of apprentices, and for this reason it was looked upon with disfavor by a majority of the foundrymen. Likewise, since the approval of the resolution by the molders' union would have led to an increase in the ratio, which they were unwilling to grant, the clause was disapproved by a referendum vote.

From this date the foundrymen annually lodged complaint against the restriction. They gave no official sanction to the molders' ratio, and held that each member of their association was free to employ as large a number of apprentices as in his estimation were required. No strikes occurred over this question in foundries operated by members of the Stove Founders' National Defense Association, but the molders locally used their efforts to maintain the ratio at one to eight. The pressure they brought to bear upon the foundrymen was of such a steady and incessant character that a number of them granted the molders' request. The question did not result in formal action at the annual conferences until March, 1899. On this occasion the molders introduced a resolution recommending the abolition of the "berkshire" system. An amendment was offered by the foundrymen providing a clause that would give recognition to an apprentice ratio of one to four. The discussion following the introduction of the resolution and the amendment indicated that the views held at that time by those present would not allow the adoption of either. Both sides were desirous, however, of making progress, and the following resolution was unanimously adopted:

*Resolved*, We recommend that the representatives of the S. F. N. D. A. obtain an expression of opinion of their membership upon the question of abolishing the "berkshire system" in their foundries, and that the representatives of the I. M. U. of N. A. secure an expression at their next convention upon the question of a change in the present ratio of apprentices; and that each party to the conference come prepared at the next meeting with statistics which will assist them in striking a ratio agreeable to both organizations, and with power to act.<sup>(b)</sup>

At this period the molders were without data on the subject, no statistics relative to the apprentice question having been secured since 1867 and 1868. At the international convention held by the molders in July, 1899, following the adoption of the above resolu-

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<sup>a</sup> Iron Molders' Journal, March, 1892, page 5.

<sup>b</sup> Iron Molders' Journal, April, 1899, page 162.



tion, the president, Martin Fox, took occasion in his report to refer to the subject in the following language:

The "berkshire" system exists in very few of the stove shops to-day, and I believe the day is near at hand when it will pass away entirely. For the sole purpose of securing its abolition I do not feel justified in advocating a change in our ratio of apprentices, but, in order that our position might be strengthened, and to demonstrate that ours is not an arbitrary and unjustifiable one, I would suggest that statistics be secured from all local unions on the line of those asked for in the editorial columns of the June Journal, and that these be submitted to the executive board, to take such action or make such recommendations as in their judgment seems necessary. Should they determine that a change of the ratio be advisable, a suitable amendment ought to be drawn up and submitted for a referendum vote.<sup>(a)</sup>

When the representatives met in March, 1900, an effort was again made to adjust this question. The foundrymen desired a ratio of one to four, which was not acceptable to the molders. The latter held that such a radical change would not be countenanced by their organization. While the molders were not in possession of statistics that would enable them definitely to demonstrate that this ratio would be more than sufficient to maintain the supply of journeymen, yet they would not accept the statement that a ratio of one to four was required. A number of resolutions relative to the subject were submitted on both sides, none of which were adopted. The discussion reached a stage where both parties realized that no agreement could then be reached which would prove acceptable to the membership of either organization. It was evident that a more general education on the subject was necessary, and with this object in view alternative resolutions were presented by the molders and adopted. They were taken up for discussion and consideration by the foundrymen at their annual convention held the following month. As these resolutions indicate the molders' attitude toward the question at that time, they are reproduced:

Whereas, after a thorough discussion of the question of establishing a ratio of apprentices to journeymen molders employed, between the conference committee, and the members of the S. F. N. D. A. whose shops would be immediately affected by the general application of such ratio to the membership of the S. F. N. D. A., it has been found impossible to agree upon a ratio that would be considered satisfactory by the parties to these conferences, it is agreed by the representatives of the S. F. N. D. A. to submit the following resolutions to the coming convention of the S. F. N. D. A. as alternative propositions which the representatives of the I. M. U. of N. A. would offer as steps towards an ultimate complete understanding upon the ratio of apprentices and the question of the future relationship of the members of the two associations.

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<sup>a</sup> Proceedings, 1899, page 5.



## RESOLUTION 1.

Whereas it is necessary, in order to maintain a proper supply of competent molders, that one apprentice be employed to every six journeymen; it being understood that one apprentice additional shall be allowed to the shop irrespective of the number of journeymen employed,

*Resolved*, That apprentices shall be educated in strict conformity with the spirit of clause 4, conference 1892, in order that a more competent class of stove molders might be secured, and further provided, that should the S. F. N. D. A. and the I. M. U. of N. A. agree to accept the ratio of apprentices herein provided, the present number of apprentices employed by members of the S. F. N. D. A. who employ a greater ratio shall not be disturbed, but no more apprentices shall be employed by these members until the accepted ratio has been reached; and,

*Further resolved*, That no molder shall be asked or required to work with a helper or "buck," and that in shops where men working with such helpers or "bucks" are now employed the number shall not be increased and when any of these from whatever cause ceases to continue to work with a "berkshire" in any of these shops their places as workers with "berkshires" shall not be filled, so that the "berkshire" system shall ultimately be discontinued in the shops of the members of the S. F. N. D. A.

## RESOLUTION 2.

Whereas, it is necessary in order to maintain a proper supply of competent molders, that one apprentice be employed to every six journeymen; it being understood that one apprentice additional shall be employed in the shop irrespective of the number of journeymen employed,

*Resolved*, That no member of the S. F. N. D. A. should, through the operation of restrictive apprentice laws, be deprived of the opportunity of working his foundry to the capacity required by his trade, and that where he can not obtain a sufficient supply of competent and reliable journeymen molders after five days' notice conspicuously placed in the shop that molders are wanted, he should exercise his right to increase the number of apprentices to the requirements of his business without hindrance or obstructions, provided that upon investigation by the presidents of the two associations, or their representatives, it is agreed between them that such condition exists. It being understood that apprentices shall be educated in strict conformity with the spirit of clause 4, conference 1892, and further provided, that should the S. F. N. D. A. and I. M. U. of N. A. agree to accept the ratio of apprentices herein provided the present number of apprentices employed by members of the S. F. N. D. A. who employ a greater ratio shall not be disturbed, but no more apprentices shall be employed by these members until the accepted ratio has been reached, except as hereinbefore provided, and

*Resolved*, That no molder shall be asked or required to work with a helper or "buck," and that in shops where men working with such helpers or "bucks" are now employed the number shall not be in-



creased and when any of these from whatever cause ceases to continue to work with a "berkshire" in any of these shops, their places as workers with "berkshires" shall not be filled, so that the "berkshire" system shall ultimately be discontinued in the shops of the members of the S. F. N. D. A.; and

*Further resolved*, That inasmuch as the I. M. U. of N. A. has demonstrated its disposition to deal fairly and justly with the members of the S. F. N. D. A. in their treatment of all questions that have arisen between the members of the two associations, it is agreed that the members of the S. F. N. D. A. will hereafter recognize the rules and regulations of the I. M. U. of N. A. in their respective foundries, except as provided in these preceding resolutions.<sup>(a)</sup>

The question had grown in importance when the annual conference was held in 1901, and the foundrymen informed the molders that a time had been reached when definite action should be taken that would relieve the situation and would place those foundrymen restricted to the one-to-eight ratio on an equal footing with their competitors. Statistics were introduced demonstrating that the one-to-eight ratio had never been in general practice, and, furthermore, that such a ratio could not maintain the supply of journeymen. The molders' representatives admitted that these statistics could not be successfully controverted, but, knowing the views held by their membership, they set forth the impossibility of making a change at that time. They pledged themselves, however, to submit the question to a referendum vote of their organization, and to use their best efforts to secure favorable action. Before the conference adjourned the subject was referred to a subcommittee, whose report was as follows:

(1) Whereas, it is conceded by the representatives of the I. M. U. of N. A. that if the ratio of apprentices to journeymen molders as set by their organization were recognized and adhered to in all the stove foundries of the country, the requirements of the trade in keeping up an adequate supply of competent molders would necessitate a change in the present union ratio of one to eight.

And whereas, the representatives of the S. F. N. D. A. and the I. M. U. of N. A. at this and preceding conferences have found it impossible to harmonize their views as to what the new ratio should be, the former holding that on the assumption that the union ratio would be generally recognized by their members and other stove foundries a ratio of one to four and one to the shop would be required to keep up an adequate supply of competent molders, and the latter contending that a lesser proportion of apprentices would suffice.

And whereas, the representatives of the S. F. N. D. A. urge that it is desirable that an honest and intelligent expression of opinion should be secured from the members of the I. M. U. of N. A. on the question of meeting the wishes of the members of their association on the apprentice question, and with that end in view and the further desire of securing uniformity in the stove foundries of the country have earnestly requested the conferees of the I. M. U. to

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<sup>a</sup> Iron Molders' Journal, May, 1900, pages 258, 259.



submit to the consideration of the members the resolution agreed upon by the subcommittee of the conference at the meeting held in Chicago, April 18th and 19th, 1900, amended to read as follows:

*“Resolved,* It is necessary in order to maintain a proper supply of competent molders, that one apprentice shall be employed to every five journeymen; it being understood that one apprentice additional shall be allowed to the shop irrespective of the number of journeymen employed.

*“Resolved,* That no member of the S. F. N. D. A. should, through the operation of restrictive apprentice laws, be deprived of the opportunity of working his foundry to the capacity required by his trade, and that where he can not obtain a sufficient supply of competent and reliable journeymen molders after five days' notice conspicuously placed in the shop that molders are wanted, he should exercise his right to increase the number of apprentices to the requirements of his business without hindrance or obstruction, provided that upon investigation by the president[s] of the two associations, or their representatives, it is agreed between them that such condition exists. It being understood that apprentices shall be educated in strict conformity with the spirit of clause 4, conference 1892, and further provided that should the S. F. N. D. A. and the I. M. U. of N. A. agree to accept the ratio of apprentices herein provided, the present number of apprentices employed by members of the S. F. N. D. A. who employ a greater ratio shall not be disturbed, but no more apprentices shall be employed by these members until the accepted ratio has been reached, except as hereinbefore provided.

*“Resolved,* That no molders shall be asked or required to work with a helper or ‘buck,’ and that in shops where men working with such helpers, or ‘bucks,’ are now employed the number shall not be increased, and when any of these from whatever cause ceases to continue to work with a ‘berkshire’ in any of these shops their place shall not be filled, so that the system shall ultimately be discontinued in the shops of the members of the S. F. N. D. A.”

*Therefore resolved,* That the conferees of the I. M. U. of N. A. realizing the force of many of the arguments in favor of a change, agree to comply with this request, and before the vote is taken to lay before their members to the best of their ability all the reasons urged by the representatives of the S. F. N. D. A. why the ratio of one to five should be adopted, and to lend every assistance to bring out a full and intelligent expression thereon.<sup>(a)</sup>

The officials of the union began a campaign of education among their members, and from April until November their official organ—the Iron Molders' Journal—contained numerous articles and editorials bearing upon the subject. Among the articles contributed was one written, at the request of the editor, by Mr. Chauncey H. Castle, president of the Stove Founders' National Defense Association. This stated in a concise and forcible way the reasons which, from the standpoint of the foundrymen, made the change of ratio necessary. From that article the following is quoted:<sup>(b)</sup>

<sup>a</sup> Iron Molders' Journal, April, 1901, page 201.

<sup>b</sup> Iron Molders' Journal, August, 1901, page 471.



At various times since 1891, this question of "ratio of apprentices" has been under discussion by the joint conference committee of the I. M. U. of N. A. and the S. F. N. D. A., with a view to an agreement, but none has been reached; although it is of large importance, and has received much consideration.

There being no agreement, there is, so far as the S. F. N. D. A. or any of its members are concerned, no limit upon the ratio of apprentices. Some of the members of the S. F. N. D. A. employ a large proportion, and others a small proportion. So that at present the ratio is open, and we should feel under obligations to sustain a member in employing any number that seemed desirable to supply his needs.

The fact that the I. M. U. of N. A. has an established limit by rule of its own, does not in any manner bind the S. F. N. D. A., as it had no voice in establishing it, has always contended it was not reasonable or adequate for more recent times and conditions, and has never agreed to abide by it.

So soon as a ratio shall be established by conference, and approved, it will become a clause of our conference agreement, thus becoming obligatory and binding.

During former years the "strike" was the prolific source of supply of molders, for in event of a strike, employers proceeded to fill their foundries as best they could, and in general to a large extent, with young apprentices, who within two to four years became full-fledged molders. A very considerable number of those now working at the trade, became molders in that way. Your and our organizations having succeeded, through the operations of our conference agreements, in doing away with strikes and lockouts among ourselves, to an extent that twelve years ago would have been deemed impossible of accomplishment.

In addition, and at the same time, removal of the dread of strikes, through the means above stated, has modified the opposition to your union, so that a number of the larger manufacturing concerns, members of our organizations, have voluntarily changed from nonunion or open shops, to union shops, and in doing so have agreed to reduce and are reducing, from the very large proportions of apprentices they were employing.

Any who will give the matter serious thought must readily see that through these changes in conditions the prospects are that the supply will be very much curtailed, and that unless a method of maintaining an adequate supply through an increase in ratio be agreed upon, a serious shortage must soon occur.

As molders must be had when needed, if no agreement be made whereby a supply shall be provided, we must engage in contests upon this open question in order to secure them. I can see no alternative.

Upon the other hand, the establishment of a reasonable ratio of apprentices, by agreement between your organization and the S. F. N. D. A. would remove another ground for serious objection to running a union shop, and would, in that manner, probably bring in yet other of our members, and would under the proposed agreement result in early practical abandonment of the "berkshire" system, both of which would seem to be desirable conditions of large importance to your organization and to its members.



While the proposed action does not provide for immediate abolition of the "berkshire" system, it provides a sure method for its gradual and early extinction.

It would be unreasonable to expect that our members would be willing to be tied up by an agreement, that if neither by themselves nor through the aid of your organization could they secure molders, they should be obliged to permanently run short-handed because our organization had tied them down to a limited number of apprentices. They are not now so tied.

Neither in many places, nor often, is such a condition as is therein provided for, likely to occur, and surely the interests of the members of your organization are thoroughly protected by providing that such privilege shall not apply excepting in such cases as the president of your organization agrees that the need of its application exists.

Yours very respectfully,

C. H. CASTLE,  
*Prest. S. F. N. D. A.*

In addition to the communicated articles the Journal printed all the data and statistical evidence available and urged a favorable vote on the change of ratio. Notwithstanding this educational campaign, the amendment was defeated, and nothing can more clearly indicate the view point held by the membership of the union at that time than their vote, which stood 504 for the change and 15,842 against it.

This action on the unions' part tied the hands of their representatives, and when the annual conference met in 1902 a serious crisis had been reached. Members of the foundrymen's association who were being restricted to one to eight stated that, owing to brisk trade, they could not secure a sufficient number of molders to operate their foundries to their full capacity and that unless they could place more apprentices at work they would be unable to fill their orders and contracts. This situation was provided for by the adoption of the following resolution, to which the molders' representatives gave their unanimous consent:

When it becomes apparent that the business of any member of the S. F. N. D. A., in whose foundry the ratio of one apprentice to eight journeymen is being observed, is being injuriously affected by his inability to secure a sufficient supply of journeymen molders, under the circumstances and conditions, and after the effort, previously mentioned; we would recommend that when the presidents, or their representatives of the S. F. N. D. A. and the I. M. U. of N. A., after due investigation are convinced that the manufacturer is suffering as set forth, through no fault of the prices or conditions prevailing in his foundry, they should by and with the consent of the employer and the shop committee of the foundry at interest agree to allow the employment of such additional number of apprentices as may be required and mutually agreed to.

If it be found that inability to secure and hold journeymen molders is due to an inequality or low standard of molding prices or undesirable shop conditions, it shall devolve upon the two presidents or



their representatives to at once take steps to remedy these prices or conditions in accordance with the standard prevailing in the district.

Further, when an additional number of apprentices is employed, the ratio thus established is not to be construed as a permanent one in such foundry, the manufacturer agreeing not to employ any more apprentices until the ratio originally obtaining in his foundry has again been reached.

We would also recommend that stove manufacturers avoid the policy of making up jobs which are so undesirable that in periods of demand for molders, few can be induced to work on them. Work which is of itself considered poor, should be divided up as much as possible, so that no molder would suffer unduly.

We feel that oftentimes molders decline to accept jobs on this account.

It is understood and agreed by the representatives of the S. F. N. D. A. that when consideration for the interests and need of their members, is shown by agreement to allow the employment of an additional number of boys, that act is not to be construed as a precedent to govern other foundries in the same district, nor to be used as an argument in favor of their enjoyment of the same right, which it is understood is agreed to simply as a remedial measure.

It is further recommended that the policy as above outlined, be pursued by the parties to this conference until the assembling of the Toronto convention of the I. M. U. of N. A. next July; and a committee of the S. F. N. D. A. is hereby invited by the representatives of the I. M. U. of N. A. attending this conference, to meet with that body or a committee thereof to confer upon the subject of an equitable apprentice ratio, with the view of reaching an agreement to govern the members of both associations thereafter.

In the event of a failure of the two presidents, or their representatives, the shop committee and employer, to agree in their findings, it is understood that the rights of the S. F. N. D. A. or the I. M. U. of N. A. to adopt such measures as they may deem advisable to protect the interests of their members, are not abridged.

Nothing in the foregoing shall be construed as changing the attitude of either association upon the general proposition of the apprentice question.<sup>(a)</sup>

It is of interest in connection with the above to note that but one instance arose where a foundryman was granted more apprentices by the joint action of the presidents of the two associations.

The iron molders held their international convention the following July, and a committee from the Stove Founders' National Defense Association was invited to be present and address the convention on the subject. The invitation was accepted and the committee presented the many reasons which led them and their association to believe that a change from the one-to-eight ratio was required in the stove industry. Later, during the convention, the committee on apprentice ratio submitted their report, which favored a ratio of one to six. The delegates, however, strongly indicated that they were

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<sup>a</sup> Iron Molders' Journal, April, 1902, page 204.



opposed to this modification, the recommendation being defeated by a vote of 107 to 309. Before the convention adjourned another effort was made to change the ratio to one to seven, but even this slight modification was rejected.

Again, at the annual conference held in March, 1903, the question arose, but as the molders' representatives were bound by the action of their convention they were unable to take any step other than to reaffirm the resolution adopted at the conference of 1902. The situation was now a most serious one, but the foundrymen realized that forcing the issue would only result in an open rupture. They were willing to give further time and allow the officials of the union to continue the work of education they were carrying on.

At the annual conference of 1904 the molders' representatives placed themselves on record as favoring a ratio of one to five, provided that if adopted it would be observed by every member of the association. They also advised the foundrymen that this question would be submitted to another referendum vote, and that every effort would be made on their part to have the question placed before their membership in a convincing manner. The campaign of education carried out through the medium of the Iron Molders' Journal and the work of the national officers in the field during 1901 had familiarized the membership with the main points connected with the question, and this education proved of great assistance to the officers in 1904.

The month following the March conference of 1904 the national officers and business agents from the several districts gathered in Detroit, Mich., and while there gave their attention to the subject of the favored ratio. The Iron Molders' Journal held its columns open for the free discussion of the question, and in its editorial section advocated the change from one-to-eight to one-to-five. As an evidence of the spirit and thoroughness with which this question was presented to the molders by their representatives, the following extracts are made from editorials appearing in the Journal during the four months preceding the taking of the referendum vote:

If the experience of other organizations is of any value to us at the present time their attitude on the ratio would warrant a liberalization of our ratio and changing it from one-to-eight to one-to-five in the stove foundries. There is also another reason that should command our earnest consideration. The association that has requested us to make the proposed change, is one that for years has manifested its desire to deal honorably and fairly with our organization, never failing to take heed, and give consideration to the grievances we have presented or the changes we desired to have them introduce. Different in spirit from many employers' associations they have never endeavored to gain a point, or take advantage of a situation, by adopting underhanded tactics, or the methods of questionable diplomacy, but openly and with a frankness that has disarmed suspicion and



won both admiration and confidence they have stated their position on all questions. In the present instance they have made a request that, backed up by data which we have verified, proves itself to be a reasonable one. With the same data in their possession they made a similar request three years ago, and during the interval they have endeavored to impress the members of the I. M. U. of N. A. with the justness of their request. They have not resorted to force or the threats of force to accomplish their object, but have placed reliance upon the fairness and intelligence of our organization. They have come to us now with the request that we should give their members an equal percentage of the apprentices that are employed, and we trust that our members will not fail to give consideration, both to the figures presented and the association in question, when they cast their votes.<sup>(a)</sup>

A number of our members were under the impression that the one-to-eight ratio was in force in about every locality except their own, or in other words that the stove foundries and, in particular the stove centers, had for some time been operated under the one-to-eight ratio. This impression led them to inquire why it was that the officers and the executive board should recommend that the ratio be increased. Do they believe in making more journeymen? was a question that was asked in many instances. If the supposed general observance of the one-to-eight ratio was a reality the question would be a vital one; but as a matter of fact the one-to-eight ratio is not and never has been observed in the majority of stove foundries. The data secured by our organization during the present year shows but two large stove centers where one to eight is observed, and six of the largest centers show respectively a ratio of 1 to 4.4, 1 to 6, 1 to 5, 1 to 6.3, 1 to 6.8 and 1 to 2.5, giving these six centers an average ratio of 1 to 5.1-6. The general average of apprentices in the stove foundries to-day is practically 1 to 5, and this ratio corresponds with the statistics gathered by our organization in 1901.

But ask a number if the ratio of 1 to 8 has not been observed by the foundrymen in the past what reason have we to believe that they would observe a 1 to 5 ratio, should we agree to the change? This question, which is frequently heard, is an important one, for its answer gives one of the most valid reasons for advocating the change. The S. F. N. D. A. has never given recognition to our apprentice ratio as an association. They have always claimed that a ratio of 1 to 8 was arbitrary and unsound. Upon the question of prices, percentage, and hours of molding they are carried out by their entire membership. On many other questions relative to shop practice they have made agreements that are binding on all of their members; but to our apprentice ratio they have never given recognition, and each member is left free to employ as many as he desires. In some localities our members have been able to carry out our constitutional provision, but in the majority of cases this has never been done. If the proposed change is made, however, the 1 to 5 ratio would become part of the conference agreements and would therefore become effective in the foundry of every member of the S. F. N. D. A. The ratio would then be a matter of mutual agreement, and not as it is to-day, a

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<sup>a</sup> Iron Molders' Journal, September, 1904, pages 678, 679.



question that is decided largely by the strength of the union on one hand and the individual foundrymen's willingness to comply with the union's position on the other.<sup>(a)</sup>

Many strikes have taken place over this question, some successfully and others with disappointing results. Enormous sums have been expended, and yet during all these years the actual average ratio has never been less than 1 to 5 in the stove industry, and it was even greater than that until of recent years. Had the molders of years ago adopted a ratio of 1 to 5, and this had been agreed to by the stove foundrymen, there would have been less journeymen turned out, and it is not overstepping the mark to say that many of them would have had a better opportunity of becoming thorough mechanics when they joined the ranks of journeymen who make up our organization.<sup>(b)</sup>

A strong feeling was manifested on the molders' part in the discussion of this subject. When the vote was returned it was found that 75 local unions had declined to express any opinion, while other unions sent in a vote equal to their entire membership. The result showed 11,308 in favor of the change and 9,028 opposed.

The vote did not amend the constitution of the molders' union, but it authorized the officers to enter into an agreement with the Stove Founders' National Defense Association establishing a 1 to 5 ratio. The same ratio has been granted to all manufacturers of stoves operating union shops, even though they are not members of the stove foundrymen's association.

When the representatives of the two associations met in March, 1905, the molders were prepared to enter into an agreement which would establish a 1 to 5 ratio of apprentices in each foundry operated by a member of the Stove Founders' National Defense Association. After some discussion of the question a resolution was unanimously adopted, as follows:

Apprentice ratio: It is agreed by and between the conferees representing the S. F. N. D. A. and the I. M. U. of N. A., (subject to the approval of the S. F. N. D. A.) that the general ratio of apprentices to journeymen molders employed in foundries of members of the S. F. N. D. A., shall be 1 to 5, and 1 to each shop, provided, however, that whenever a member of the S. F. N. D. A. finds he can not secure the number of molders he may require for the needs of his business, the question shall be referred to the presidents of the two associations or their representatives for investigation and relief. If it is found that the member of the S. F. N. D. A. is entitled to relief he shall be allowed such additional number of apprentices as shall be mutually agreed upon.<sup>(c)</sup>

As some foundries were employing a ratio of 1 to 8, and others a much higher number, it became evident that unless the change was made in a gradual manner unnecessary hardship might be inflicted

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<sup>a</sup> Iron Molders' Journal, October, 1904, page 754.

<sup>b</sup> Iron Molders' Journal, November, 1904, page 829.

<sup>c</sup> Iron Molders' Journal, April, 1905, page 250.



by throwing molders out of employment or causing idleness among apprentices. To avoid this the following resolution was adopted:

*Resolved*, The number of apprentices shall be computed upon the number of floors being operated by journeymen molders, it being understood that when the force of molders is increased, said increase shall have been in existence not less than 8 weeks previous to the employment of additional apprentices.

In shops where the ratio at present is more than 1 to 5 the ratio agreed upon shall be reached by refraining from placing new apprentices at work, until such time as the present number of apprentices employed will have been reduced to the proper number, and that in the shops where the present ratio is less than 1 to 5 no journeyman molder shall be discharged or laid off for the purpose of supplanting him by an additional apprentice.<sup>(a)</sup>

At the foundrymen's annual convention held in May of the same year the resolutions were adopted, and they were put in effect June 1, 1905.

Thus was brought to a close a struggle which began with the birth of the iron molders' union in 1859 and which had on several occasions threatened to destroy the system of conciliation adopted in 1891 by the foundrymen and molders.

### "BUCKS."

The "berkshire" system—that is, the employment of helpers by the molders—was correlative to the apprenticeship question, though it never occupied the prominent position held by the latter. Even before the time of the Stove Founders' National Defense Association the molders had succeeded to a large extent in doing away with this system, and but a minority of the associated foundrymen had "bucks" working in their foundries. When the first conference agreement was made, the question came up in an informal manner, but its first official mention was at the conference of 1899, when it was brought forward by the molders. Action on this question hinged at first, as already stated, upon an adjustment of the apprentice ratio, but in 1902, before that question was settled, a mutual understanding was reached that the few foundrymen employing "bucks" would discontinue the practice. This they did, and it was entirely abolished before the spring of 1904. While some of the foundrymen in times past had contended as vigorously for this system as the molders had opposed it, experience had demonstrated that it was not conducive to good workmanship, and they had ceased to employ "berkshires" even before the time when the system was abolished by the recommendations of their conference committee.

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<sup>a</sup> Iron Molders' Journal, April, 1905, page 251.



## LIMITATION OF OUTPUT.

Limitation of output by the molders had for several years been the subject of serious consideration by both parties affected. It was looked upon by the foundryman as an arbitrary restriction which prevented him from securing the full output of his plant and seriously handicapped him when trade was brisk and molders scarce. On the other hand, the molders believed that a restriction or limitation of their earnings was absolutely necessary for the protection of their interests and the maintenance of the molding price. From earliest times the molders' unions had given official sanction to this practice. It was taken up in their national conventions and at the London, Ontario, convention, held in 1886, the following was unanimously adopted as one of the standing resolutions:

*Resolved*, That all molders working at piecework under the jurisdiction of the I. M. U. of N. A., be not allowed to make over \$3.50 a day. The penalty violation of this to be left discretionary with the local unions.

This resolution was stricken out at the convention held in St. Louis in 1888, and the regulation of the limit and the penalties for its violation were left, as they had formerly been, in the hands of the local unions.

Three main reasons, based largely upon experience, had led the molders to adopt methods which would regulate the amount of their earnings. Under unrestricted output they had seen the vigorous molder, in the full enjoyment of health and strength, set a pace on certain work, which other molders of less bodily strength or of advanced years were expected to follow. When unable to do so they were subject to constant nagging by the foremen, and the output of the strongest and most active was continually held up to them as an example.

There was also the question of unemployment, which the molders took notice of, and the opinion prevailed that when times were dull a large output by some molders would result in a longer period of idleness for those out of work.

But the most important reason for restricting output was the effect that large earnings would have upon the piece prices. Before the advent of the Stove Founders' National Defense Association, and for a period after its organization, when the molders requested higher prices, the earnings on certain work, should they be above the average, were used as an argument on the foundryman's side that the molding price should not be advanced. In fact, often an exceptionally active molder was employed at a foundry for the purpose of doing his utmost in order that his earnings on a piece of work might equal if not



exceed the earnings of other men. As indicative of the molders' view point on this question at that time, we reproduce an editorial contained in the *Iron Molders' Journal*, September, 1886:

It may be possible in the enactment of the law limiting the amount that pieceworkers shall put up as a day's work, that, to those who are and have been making and putting up over the amount, an injustice has been done, by what, they say, is reducing their wages. Well, perhaps if we look at the question in a selfish light it might be so construed. But what about the whole membership? Does it not benefit more members by an equitable distribution of the jobs and work? Does it not lighten the burden of the overworked and avaricious member, who, in his efforts to make big wages, is daily overexerting himself and prematurely breaking himself down to not only the injury of himself, but that of his family and his fellow-workman? And do not our employers continually contrast the greatest with the smallest wages made and make that one of their arguments for cutting prices? In this age of machinery the proprietors do not look at the quantity of work produced, but at the cost of production; and where a man is making more money than they think he ought to, they never refer to the amount of work done, but to the amount of money made. Then, is it not better that we should divide the amount of money among our brothers than have the boss make the division 'twixt the molder and himself, and, in so doing, soon make it impossible for the molder to reach the limit? It has not been many years since that most any able molder could easily put up and overmake the limit. But how is it now? And what is the reason? We answer just such as herein described.

The practice of limiting the output came into existence as a protective measure. Under a condition that allowed the unregulated pricing of piecework based largely upon the earnings of the most muscular and active these protective restrictions would be applied in all of their rigor by the molders, if it lay in their power to do so. It is obvious that where the strength of the union was sufficient to enforce regulations of this character abuses would arise, and they would lead to vigorous objections made by the foundrymen. This question frequently came up in an informal manner at the earlier annual conferences between the representatives of the two associations. As the molders in their convention of 1888 had struck the clause relating to the limitation of output from their constitution they maintained that the national union did not recognize any limitation. Several of the local unions, however, continued the practice, and in 1902 the foundrymen expressed their desire to have such steps taken as would entirely eliminate this system from the foundries operated by their members. It appeared evident to the representatives of the molders, however, that some guaranty should be given which would eliminate the belief held by many molders that large earnings would tend to reduce the piece prices; otherwise, the molder would not feel free to put forth his best efforts, fearing that he would



endanger his future earnings. This guaranty was made by the adoption of the following clause in the conference agreements of 1902:

Inasmuch as it is conceded by the members of the S. F. N. D. A. that the earnings of a molder should exercise no influence upon the molding price of work, which is set, according to well-established precedent and rule of conference agreements, by comparison with other work of a like kind, the placing of a limit upon the earnings of a molder in the seven hours of molding should be discontinued in shops of members of the S. F. N. D. A.

At the national convention of the Iron Molders' Union of North America, held in July of the same year, President Martin Fox made special reference to this clause. The convention thereupon placed itself on record as being opposed to any form of limitation of output in any branch of their craft.

It will be noted that the clause above quoted lays down the principle that the earnings of an individual should have no influence on any price that might be set, but that all work should be priced upon the basis of similar work made in the shop or district. Under the conditions existing prior to the formation of the Stove Founders' National Defense Association all prices were set by the individual foundryman and at the lowest rate that could be secured, the only restraining influence being the refusal of the molders' union to accept them. With the advent of the Stove Founders' National Defense Association there came a marked change. The individual foundryman no longer remained the deciding factor. His decision as to a price was no longer absolute, for the final authority had been vested in the stove founders' association. In course of time, after the association had demonstrated its willingness and power to prevent any of its members from cutting molding prices, the application of the principle laid down in the agreement removed whatever fear had existed in the molder's mind. He was assured that large earnings would not reduce the piece prices. Each molder was free to do his best without fear of injuring his own or his shopmates' interests. The value of this freedom to the foundryman is also evident, in case a limit had existed in his foundry, for he was no longer hampered by a union regulation limiting the productive capacity of his plant and holding back his most active workmen. The situation is well stated by Mr. Cribben, in his presidential address before the National Association of Stove Manufacturers in 1904. He said:

At the outset, the defense association found that the labor unions with whom they had to deal had in force many obnoxious rules that operated to the injury of the manufacturers, such as limiting the amount of money each man should earn by the piece, compelling the skilled and active workman to occupy the same place as the inferior man, and applying the rule that "once a workingman, always a workingman," thereby compelling him to be a hewer of wood and



a drawer of water during the balance of the term of his natural life, and depriving him of the opportunity of earning good wages and saving his money for the purpose of engaging in some business and becoming his own employer. This method of limiting the output of the skilled workman has been almost universally abolished among the stove molders, and the few unions that have it still in force have increased the amount each member shall earn almost to a maximum. The above and many other obnoxious rules detrimental to the interests both of employer and workman have been abolished or minimized, thanks to the efforts of the defense association.<sup>(a)</sup>

### PRICE BOOK.

The molders' representatives at the conference of 1896 endeavored to have a uniform rule adopted which would place the molders in each foundry in possession of the piece prices paid therein. Some foundrymen had already given their molders a price book, in which was entered the individual piece price of every casting made, as well as the totals. Other foundrymen had positively declined to allow their molders to have a price book. There were several obvious reasons for their dislike to comply with the molders' request, one being the motive that leads certain merchants to mark the price of their goods in hieroglyphics instead of figures. But if a uniform price on a similar class of work was to be paid in each district it was evident that the molders as well as the foundrymen should be aware of the prices to be paid. The foundrymen's representatives were convinced that the molders' position was logically sound, and the following resolution was unanimously adopted in 1896:

Firms composing the membership of the S. F. N. D. A. should furnish in their respective foundries a book containing the piece prices for molding, the same to be placed in the hands of a responsible person.

Some members of the foundrymen's association, who were opposed to the idea of placing a price book in their molders' hands, evaded the spirit of this clause by placing the book with a bookkeeper or foreman, thereby preventing free access to it on the molders' part. This was called to the attention of the conferees in 1897, and at the conference of 1899 the matter was covered by the unanimous adoption of the following amendment to the original clause:

Stove manufacturers, members of the S. F. N. D. A., shall furnish in their respective foundries a book containing the piece prices for molding, the same to be placed in the care of the foreman of the foundry and a responsible molder agreeable to both employer and employees, said book to be placed in a locker on molding floor, to which the foreman and the molder so elected shall each carry a key.

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<sup>a</sup> Metal Worker, March 14, 1904, page 59.



The adoption of this amendment accomplished the desired result, and a question of long standing in the stove industry was adjusted upon a basis mutually satisfactory.

### “DULL IRON.”

The question of paying the molder for work lost through pouring the molds with “dull iron” was also one that came into existence with the advent of the stove industry. At times it was almost impossible to place the responsibility for work lost through this cause, since molten iron loses its life rapidly after being drawn from the cupola. Iron hot enough to run the thinnest pieces would be held at times in the ladle carried by the molder until it was unfit for use. Under such circumstances the loss of work could properly be attributed to the molder’s carelessness or lack of judgment. On the other hand, the greater amount of work misrun by reason of dull iron was caused by a “bad heat,” the iron drawn from the cupola not having sufficient life and fluidity to properly fill the molds. The molders were not responsible for this, and a fair-minded employer would not discount against the molder’s work which was lost through this cause. The fact that both foundryman and molder might be responsible for work misrun gave ample opportunity for disputes, and it was difficult to devise a clause that could be used as a basis on which all disputes could be adjusted. The first effort was made in 1896, when the conference adopted the following:

*Resolved*, When there is a bad heat causing dull iron, the foreman’s attention shall be called to it, and payment shall be made for work that is lost from this cause, only when poured by the foreman’s order, or person next in authority.

If sufficient iron is not furnished the molder to pour off his work and such work has to remain over, he shall be paid for such work remaining over at one-half the regular price.

These rules shall apply except in case of breakdown of machinery, or other unavoidable accident, when no allowance shall be made.<sup>(a)</sup>

This clause remained in force for seven years, but did not give entire satisfaction to either side. At the annual conference of 1903 it was amended to read:

When it is shown that the aggregate loss on account of dull iron amounts to 4 per cent of the total value of the work poured by the molders in any one heat, it shall be deemed a bad heat and payment shall be made for all work lost from this cause; it being understood that when more than one cupola is used the molders receiving iron from each cupola shall be considered the same as though they were working in separate shops in making the above computation.

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<sup>a</sup> Iron Molders’ Journal, April, 1896, page 151.



If sufficient iron is not furnished the molder to pour off his work, and such work has to remain over, he shall be paid for such work remaining over at one-half the regular price. These rules shall apply excepting in case of breakdown of machinery, or other unavoidable accidents, when no allowances shall be made.

This clause also has failed to give complete satisfaction to either side, but has proved more acceptable than the former one.

### OPEN SHOPS.

When the first joint conference was held in 1891, many members of the Stove Founders' National Defense Association were operating open shops and nonunion shops, and the question of applying the provisions of the conference agreements to such foundries came up prominently for discussion. As regards the nonunion shops, it was agreed from the start that they should not come under the jurisdiction of the conference. But the question of open shops, employing both union and nonunion molders, was more difficult. Many foundrymen operating such shops were inclined to look upon the union with distrust and to doubt the value of any agreement which might be entered into. Some of these employed a majority of nonunion molders, and were unwilling to submit for adjudication the disputes which might arise in their foundries to a body composed in part of officers of the Iron Molders' Union. To avoid binding this class of employers, and yet in order to extend the agreement as far as seemed practicable at that time, the conference agreed that it should apply to those foundries where a majority of the molders were members of the Iron Molders' Union.

As time passed and the friendly relationship between the two associations became more assured the molders felt that an amendment should be made to this clause, so that it would affect any member of the molders' union working for a member of the Stove Founders' National Defense Association even though the nonunion molders in the foundry where he was employed were in the majority. At the annual conference of 1897 the question came up, but the foundrymen were adverse to any change. In 1898 the question was again considered, and Mr. Martin Fox contended that under the clause, even though a fair percentage of the molders might be members of the union, they had no recourse in case a grievance arose. The molders could not appreciate the motives which prevented the foundrymen from amending the clause and he hoped that an amendment would be added in the interest of fairness and justice to both parties. The discussion following was of a spirited character, but finally the following amendment was adopted:

Whenever a difficulty arises between a member of the S. F. N. D. A. (whose foundry does not come under the provisions of clause 3, 1891



conference) and the molders employed by him, and said difficulty can not be amicably settled between the member and his employees, it shall be submitted for adjudication to the presidents of the two organizations, or their representatives, without prejudice to the employees presenting said grievance.

From the date at which this clause was adopted any dispute arising in a foundry where union molders are employed has been taken up for adjustment by the officers of the two associations. Moreover, since the clause protects the union molders who bring up grievances from discharge or discrimination while the nonunion molders have no official recognition, the latter have from time to time joined the organization in order to get the same protection; so that while in 1891, on account of the majority clause, less than half the foundries were covered by the agreement, at the present time all but three or four of the foundries are covered.

### SUMMARY.

The foregoing account of the issues which have come before the conference committees of the molders and stove manufacturers would be incomplete without a full statement of the motives and spirit in which they were taken up and advanced toward a settlement. One who has followed the discussion can hardly fail to have noticed that at no time have abstract or general questions of industrial ethics entered into their deliberations. At the time of the first conference the industry had gone through a period of loss and suffering extending over forty years, culminating in disastrous strikes and lockouts, scarcely paralleled in any other industry. Out of those struggles had arisen two powerful organizations equipped for further contest at any time when either saw the opportunity to inflict a blow. In such a situation the one paramount question was that of avoiding, if possible, open hostilities. It was impossible at that time to reach an agreement on any of the industrial issues that separated the two antagonists. In some localities one of them had the advantage, while in other localities the advantage was with the other. Neither was willing to yield a point in turn for concessions elsewhere. But it did seem possible to arrange a simple form of procedure by which disputes in the future might at least be discussed by the interested parties before resorting to industrial battle. The problem was simply one of keeping the foundries at work while removing the dispute from the street to the office. This was all that the first conference accomplished. It created a mode of procedure and gave authority to the representatives of the two associations to act. It laid down no rules whatever to guide them in making their decisions.



Furthermore, great care was taken to avoid imposing the new arrangement on those employers who protested against it. The employers' association was by no means united on the policy of entering into any agreement with the molders' union. Those who had nonunion shops or shops with a minority of union members considered themselves already sufficiently protected, and they were unwilling to submit the control of their foundries to a committee in which the union had a voice. But other foundrymen with union shops or shops with a majority of union members were willing to enter into an arrangement which seemed likely to give them additional protection by invoking the national union to control the local unions. Thus the agreement was made to apply only to foundries where a majority of the molders were members of the union. The others were made exempt.

This partial and experimental character of the agreement reached at the first conference has held true throughout all the conferences. At no time have the conferees agreed upon any measure that they were not confident could be enforced. They have gone only as far as was practicable at the time, in view of the divided opinions of their constituents. Instead of abandoning their experiment or breaking off negotiations, because the other side would not agree to remedy abuses which were keenly felt, they have both been willing to wait until longer experience and greater confidence in each other had cleared the way. This has already been made plain in considering the manner in which the serious issues of apprenticeship and limitation of output were strung out through ten or twelve years of negotiations before a settlement was attained. Other issues similarly handled have been mentioned. During all these years there was plenty of gunpowder to have caused an explosion, but the leaders of each organization carefully refrained from forcing the others to the point where they could no longer hold their members from applying the torch. Instead of radical action they have relied on education, and the history of the conference agreements is much more than a chronicle of events—it is most of all a history of changing opinions and of a slow but profound change in the attitude of mind with which not only the leaders but, more important, the bulk of the membership, have come to look upon the issues that have separated them in times past. This change in the point of view is apparent throughout, but there are two or three significant features that stand out strongly.

Perhaps the most significant is the change in attitude of the workmen toward annual agreements with employers. In the earlier days the molders were stubbornly opposed to any obligations that would prevent them from striking at the opportune moment when their employer was in a corner, tied up with contracts. At such a time



they could wrench from him 10, 20, or even 30 per cent in advances on wages, and they strangely considered that this liberty of "hold up" was a triumph of unionism even though they knew that the employer would get it back from them when his turn came. It was this view of the matter that led them to hold back for several years after they knew that the Defense Association had made overtures toward a system of agreements. They did not appreciate the commercial side of the industry, nor realize that the manufacturer, to conduct his business safely, must have, most of all, stability. Now that the agreement system has had a trial the manufacturers are able to look ahead for at least a year and even longer, and they need pay attention only to the prospects of trade and the state of the markets for their raw material. Consequently they are willing to keep their foundries in operation and to stock up their stoves in a slack season in anticipation of a future market. Employment has become far steadier than before, and, although the molders have not secured the large but sporadic advances in wages that they were able to get in former periods of prosperity, neither have they suffered the deep cuts that formerly followed in a period of depression. Their yearly earnings have therefore been greater than ever before. It was a novel experience to the molders to see the foundrymen during the depression of 1893 to 1898 continue to pay the same prices for molding that had been paid in the preceding years, when they knew that, with only half their members employed, they were at the mercy of any employers who might chance to make an attack upon them. This experience converted the molders finally to the system of annual agreements on wages and brought them to the attitude where they could appreciate the manufacturers' point of view in desiring stability of industrial conditions. Now they would strike to secure the annual agreements which formerly they felt were a restriction on their liberty.

A similar evolution has taken place in the view of the foundrymen respecting the union shop. Underlying all the strikes and lockouts of the earlier period, the demand of the unions for the exclusive employment of union members, and the consequent observance of union rules and regulations, was the ever-present source of bitter hostility on the part of the employers. We have shown how this question was deftly avoided at the first conference in 1891. At that time fully one-half of the stove foundries were open or nonunion shops. The policy of avoiding the question as adopted at the first conference has been followed at succeeding conferences, and the question of open or closed shop has, as a matter of fact, never come up for discussion. The foundrymen became wholly indifferent to the subject and paid no attention to the unionizing of their foundries, which



has been steadily advancing since the conferences began to bring results. In the course of time they have actually come to lean to the other side, and even to invite the national officers to organize their foundries. This change in attitude was induced by the knowledge of the discipline and faithful observance of agreements enforced by the officers of the union. A union shop was no longer a menace, because the stability which the manufacturer required was as fully guaranteed under union rules as it was under the foundrymen's personal control. This new view of the subject is shown most conclusively in the case of the Bridge and Beach Manufacturing Company. It was the strike at the foundry of that company which, in 1887, had precipitated the great struggle between the Defense Association and the Iron Molders' Union. The company was victorious and succeeded in operating a nonunion shop and freeing itself from the dictation of the union. Yet thirteen years later the manager who had so successfully defeated the union in 1887 invited the president and vice-president of the national union to visit the foundry and, in company with the officers of the local union, draw up an agreement providing for a union shop and union rules. In writing upon the subject to the vice-president thereafter he said:

My action is the result of contact with the officers and representatives of the Iron Molders' Union of North America at our conference meetings. I have been impressed with the conservatism of your officers from Mr. Fox down, with whom I have come in contact, and gradually became converted to the fact that trade unions are all right if their leaders are conservative and fair minded. I finally decided that sooner or later I would arrange with your organization—the rest you know.

We have run an open shop, as all our men must admit, successfully, fairly and with every proper consideration for our employees. We wish to now run a union shop just as successfully. If we succeed, others will follow. I would ask you to say to the committee that may be selected that they should be conservative and look carefully on all sides of a proposition before they take a stand. As I stated in your presence, I wish each member of the committee, who may be appointed, to feel he has a position of trust, and my desire is that our best men will not dodge the position of a committeeman, but seek it. The great trouble in most union shops has been that incompetent men have been put on the committee, men who are not good all-round molders and fair minded.<sup>(a)</sup>

As suggested by the manager, his action has been followed by other foundrymen until all but three or four of the foundries represented in the Defense Association have become union shops.

Another stove manufacturer who has occupied a prominent place in the industry is Mr. Grange Sard, of Rathbone, Sard & Co., Albany. As showing his attitude in 1885, the following extract is made from

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<sup>a</sup> Iron Molders' Journal, August, 1900, page 451.



his address as president of the National Association of Stove Manufacturers before their convention of that year:

The unwillingness of labor to share in the depression of prices which our goods have experienced the past three years led to strikes and strife in many of the most important manufacturing centers. There could be only one result, and that has been that labor has been compelled to yield; and to the loss of time has been added the expense of contention and the waste of idleness. The low price of other manufactured goods and farm products, and the decreased earnings of mechanics generally, made lower prices for stoves necessary. The stove manufacturer has conformed to the times by reducing his prices and profits. The employee must also accept the inevitable lower wages.

It has never been within the province of this association to take positive action with reference to wages, but it is proper that I should make reference to the wage question without any recommendation as to future action. It is in the interest of the stove-buying public that prices for stoves should be reasonably low, and that all restrictions of trade unions which enhance the cost should be removed. The restrictions of the molders' union are intended to prevent the subdivision of labor by the working together of skilled and unskilled workmen; it intends to limit the number of men who shall learn the trade, preventing the man who is doing common labor from learning a trade which shall permit his increasing his earnings and comforts, and it forbids the use of labor-saving machinery in the molding department. That these restrictions are purely selfish and contrary to public policy admits of no argument; and in the attempts of the molders' union to enforce these provisions of their constitution they have during the past year suffered most disastrous defeats, so serious that their entire organization is seriously shattered, and if it should be dissolved entirely it would be beneficial to our association, the public, and the workmen themselves.<sup>(a)</sup>

Nineteen years after expressing the foregoing views Mr. Sard addressed a meeting of the National Civic Federation at New York. The following is a stenographic report of his statement at that time:

I have been through the mill, so to speak. I have fought the union. I have thought it was to the interest of manufacturers to destroy the union. But I have been shown the error of my way, and I am prepared to say now and have thought for many years that it is the wise employer who encourages rather than discourages unionism.

The Stove Manufacturers' Defense Association was organized in 1886 for the purpose of fighting the union, of resisting what we termed unjust demands. We had our fight with the union, and at the end we had both more respect for the power and fighting qualities of the other, so that in 1891 we had a conference committee appointed representing six employees and six employers. They drew up an agreement which should fix the rate of wages and the conditions in shops for the current year. Previous to that time, each manufacturer had settled his own difficulties, but they were settled

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<sup>a</sup> American Artisan and Hardware Record, April 2, 1904, page 21.



after the blow was struck. A fundamental principle of each agreement was that if there was any grievance in any of the shops of members of our association, the manufacturer should not lock his men out, nor should the men strike, but that pending a conference to settle the difficulty, the men should all remain at work. Since 1891, we have had no strikes of any consequence. If anyone thinks that these agreements are going to bring about the millennium, they are greatly mistaken. There is bound to be friction and trouble. But by means of these agreements the troubles are reduced to the minimum. There has been no serious interruption to our business, but we have progressed smoothly and satisfactorily—immensely satisfactorily to the workmen and to the employers as well.

We especially want to consider what these agreements shall embrace. No agreement can cover all questions as to the relation of capital and labor. Any attempt to make an agreement cover everything will simply result, in my judgment, in failure. The fewer important subjects it covers the better. You can't start off and have everything as right the first year as you will the second and the third. So do not try to make an agreement that shall provide for every possible contingency that may arise under any circumstances. Above all, don't attempt to put into the agreement matters of controversy which can not possibly be settled by agreement. There are fundamental views which employer and employee hold, and they do not propose to give them up, and it is unwise to ask either side to renounce them in an agreement. So there are things which need not and ought not to be mentioned in an agreement, but an agreement may be made which I assure you by my personal experience may be the greatest means of settling disputes between labor and capital and that will remove the bitter feeling that does, but should not, exist between employer and employee. In order to make agreements effective, you must recognize the union. Making your agreements with the union, you depend upon the union for carrying them out. If a man has a decided antipathy to unions, he will not, naturally, participate in any such agreement; but the man who wants to fight it out on his own lines will have his troubles beyond expression. I want simply to impress you, from my experience, with the utmost value of agreements between employers and employees and the importance of having such agreements express certain essential things, such as wages and shop conditions, without any attempt to cover every possible contingency.<sup>(a)</sup>

The foregoing views of Mr. Sard may be said to fairly express those held by other members of the Defense Association. Neither they nor the iron molders lay claim to a discovery that has solved the labor question—they have simply solved the question, as far as they are concerned, of avoiding strikes and lockouts. And no more convincing argument do they bring forward than the contrast in their own experience between the destructive contests accompanying the period of prosperity and depression from 1880 to 1887 and the entire absence of conflict during the far more severe depression of 1893 to 1897, and the period of prosperity beginning in 1898.

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<sup>a</sup> National Civic Federation Monthly Review, July, 1904, page 14.



## PERSONNEL.

The marked success which has followed the signing of the first conference agreement and the peaceful relations between the foundrymen and molders that have ensued have been due in no small measure to the personnel of the leading officers in both associations. They were all practical men, and were not carried away in their efforts to find a solution of the problems which confronted them by abstruse speculations. They insisted on applying the ordinary rules of common sense to each situation as it arose. Several of the representative foundrymen had begun life as molders and had been members of the Iron Molders' Union. Prominent among these were Mr. Henry Cribben, first president of the Stove Founders' National Defense Association, and Mr. Thomas J. Hogan, who for years has been secretary of the association, and upon whose shoulders has fallen much of the work entailed by the settlement and adjustment of local disputes. Mr. Martin Fox held a national office in the molders' union from 1878 to 1890, when he was elected president of that organization, holding the position until 1903, when ill health forced him to resign. He was personally acquainted with a majority of the foundrymen and thoroughly familiar with the details of the various questions which had led to disputes in the stove industry. Associated with him and acting frequently as his deputies were vice-presidents who had received practical training as molders and local officers before being elected to more responsible positions. In later years four journeymen stove molders working at the trade and two national officers have acted as the molders' representatives. These four molders have always been selected because of their knowledge of the trade and their intelligence. It has always been a recognized fact that the personnel of the conferees has been a large factor in preserving peace, and as indicating this an extract is given from one of the leading trade publications of the stove industry:

Much of the phenomenal success of these conferences, whose results affect several hundred thousand, perhaps half a million, persons directly and indirectly, is due to the personnel of the board. The Iron Molders' Union, while sending thoroughly practical men to these conferences, have been uniformly represented by able and conservative men, who, while pertinacious for the welfare of the interests they represent, have never shown any taint of an arrant demagogism. On the contrary, they have shown an almost sacred regard for the high responsibility placed on their shoulders by thousands of their fellow-workmen, and have upheld their cause tactfully, persistently, and courteously. The representatives of the S. F. N. D. A. are all men possessed of rare practical knowledge of the stove business, rare courtesy, and ability to find satisfactory solutions to what would be ugly problems for the uninitiated to handle. The fact that Henry Cribben and Jeremiah Dwyer, who are old timers on this conference com-



mittee, started as journeymen molders and climbed the ladder rung by rung that starts at packing sand in the flask and ends in the presidency of a great stove concern gives them a sympathy for the welfare of the molders that is appreciated by the conferees from the union.<sup>(a)</sup>

### AGREEMENTS WITH OTHER UNIONS.

The success of the conference agreements with the molders led the Defense Association finally, in 1902, to make similar agreements with the Metal Polishers, Buffers, Platers, Brass Molders, and Brass Workers' International Union of North America, and with the Stove Mounters' International Union of North America.<sup>(b)</sup> In contrast with the history of the molders' conference agreements, it was the unions in these two cases that first made overtures to the Defense Association for agreements, and these, after two or three years of consideration, were consented to. In conclusion, the practical workings of the system in relation to the three unions now included in its operation is shown by the following address by Mr. Chauncy H. Castle, president of the Stove Founders' National Defense Association, at the convention of that association held May 9, 1905. He said:

While your officers have during the last year, had a large number of grievances to adjust, none of them was of a very serious nature. This may be accounted for by the fact that the officers of the various organizations with which we have agreements have become more familiar with the objects and interests of the agreements and impressed with their importance and value in the settlement of questions in dispute. I am pleased to be able to say that in all cases, the letter and spirit of the agreements have been carried out, so that peace and harmony prevailed.

The number of cases of general importance that have been adjusted during the last year is 71. Of this number those involving the molders were 36; mounters, 28; polishers, 7. In 6 instances the molders quit work and were, in accord with the agreements, obliged to return before consideration could be properly given to their grievances. In the same number of cases the mounters who had gone out on an independent strike were, under agreements, obliged by their officers to resume work, pending adjustment. In one or two cases, our members shut out their workmen through error, but on being admonished by us, opened the shop to them while the grievances were being taken up and adjusted under the agreements. In all instances the questions were adjusted without difficulty with little expense and in full accord with the intent and purpose of our agreement.<sup>(c)</sup>

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<sup>a</sup> American Artisan and Hardware Record, April 2, 1904.

<sup>b</sup> See Appendixes 1, 2, and 3 for the various agreements.

<sup>c</sup> Metal Worker, May 13, 1905.



**APPENDIX 1.—CONFERENCE AGREEMENTS BETWEEN THE IRON MOLDERS' UNION OF NORTH AMERICA AND THE STOVE FOUNDERS' NATIONAL DEFENSE ASSOCIATION.**

## CONFERENCE, 1891.

Whereas, there has heretofore existed a sentiment that the members of the Stove Founders' National Defense Association and the members of the Iron Molders' Union of North America were necessarily enemies and in consequence a mutual dislike and distrust of each other and of their respective organizations has arisen, provoking and stimulating strife and ill-will, resulting in severe pecuniary loss to both parties: Now, this conference is held for the purpose of cultivating a more intimate knowledge of each other and of their methods, aims and objects, believing that thereby friendly regard and respect may be engendered, and such agreements reached as will dispel all inimical sentiments, prevent further strife and promote the material and moral interests of all parties concerned.

## CLAUSE 1, CONFERENCE 1891.

*Resolved*, That this meeting adopt the principle of arbitration in the settlement of any dispute between the members of the I. M. U. of N. A. and the members of the S. F. N. D. A.

## CLAUSE 2, CONFERENCE 1891.

That a conference committee be formed, consisting of six members, three of whom shall be stove molders appointed by the Iron Molders' Union of North America and three persons appointed by the S. F. N. D. A., all to hold office from May 1 to April 30 of each year.

## CLAUSE 3, CONFERENCE 1891.

Whenever there is a dispute between a member of the S. F. N. D. A. and the molders in his employ (when a majority of the latter are members of the I. M. U.), and it can not be settled amicably between them, it shall be referred to the presidents of the two associations before named, who shall themselves, or by delegates, give it due consideration. If they can not decide it satisfactorily to themselves, they may by mutual agreement summon the conference committee, to whom the dispute shall be referred, and whose decision, by a majority vote, shall be final and binding upon each party for the term of twelve months.

Pending adjudication by the presidents and conference committee, neither party to the dispute shall discontinue operations, but shall proceed with business in the ordinary manner. In case of a vacancy in the committee of conference, it shall be filled by the association originally nominating. No vote shall be taken except by a full committee or by an even number of each party.

## CLAUSE 4, CONFERENCE 1892.

Apprentices should be given every opportunity to learn all the details in the trade thoroughly and should be required to serve four years. Any apprentice leaving his employer before the termination of his apprenticeship should not be permitted to work in any foundry under the jurisdiction of the I. M. U. of N. A., but should be required to return to his employer. An apprentice should not be admitted to membership in the I. M. U. of N. A. until he has served his apprenticeship and is competent to command the average wages. Each apprentice in the last year of his apprenticeship should be given a floor between two journeyman molders, and they with the foreman should pay special attention to his mechanical education in all classes of work.

## CLAUSE 5, CONFERENCE 1892.

The general rate of molders' wages should be established for each year without change.

## CLAUSE 6, CONFERENCE 1892.

When the members of the Defense Association shall desire a general reduction in the rate of wages, or the Molders' Union an advance, they shall each give the



other notice at least thirty days before the end of each year, which shall commence on the first day of April. If no such notice be given the rate of wages current during the year shall be the rate in force for the succeeding year.

CLAUSE 7, CONFERENCE 1892, AMENDED 1903.

The present established price of work in any shop should be the basis for the determination of the price of new work of similar character and grade, unless the presidents of the two organizations, or their representatives, shall decide that the established prices of similar work in the shop are not in accord with the price of competitive goods made in the district.

CLAUSE 8, CONFERENCE 1893.

Any existing inequality in present prices of molding in a foundry or between two or more foundries should be adjusted as soon as practicable upon the basis set forth in the foregoing paragraphs by mutual agreement, or by the decision of the adjustment committee provided by the conference of March, 1891.

CLAUSE 9, CONFERENCE 1896.

Firms composing the membership of the S. F. N. D. A. should furnish in their respective foundries a book containing the piece prices for molding, the same to be placed in the hands of a responsible person.

CLAUSE 10, CONFERENCE 1896.

New work should always be priced within a reasonable time, and under ordinary circumstances two weeks is considered a reasonable time, and such prices, when decided upon, should be paid from the date the work was put in the sand.

CLAUSE 11, CONFERENCE 1896, AMENDED 1903.

The members of the S. F. N. D. A. shall furnish to their molders: Shovels, riddles, rammers, brushes, facing bags, bellows and strike-off, provided, however, that they charge at actual cost tools so furnished, and collect for the same, adopting some method of identification; and when a molder abandons the shop, or requires a new tool in place of one so furnished, he shall, upon the return of the old tools, be allowed the full price charged, without deducting for ordinary wear; and damage beyond ordinary wear to be deducted from amount to be refunded.

CLAUSE 12, CONFERENCE 1896, AMENDED 1903.

When it is shown that the aggregate loss on account of dull iron amounts to 4 per cent of the total value of the work poured by the molders in any one heat, it shall be deemed a bad heat, and payment shall be made for all work lost from this cause; it being understood that when more than one cupola is used, the molders receiving iron from each cupola shall be considered the same as though they were working in separate shops, in making above computation.

If sufficient iron is not furnished the molder to pour off his work, and such work has to remain over, he shall be paid for such work remaining over at one-half the regular price.

These rules shall apply, excepting in case of breakdown of machinery, or other unavoidable accidents, where no allowance shall be made.

CLAUSE 13, CONFERENCE 1898.

Whenever a difficulty arises between a member of the S. F. N. D. A. (whose foundry does not come under the provisions of clause 3, 1891 conference) and the molders employed by him, and said difficulty can not be amicably settled between the member and his employees, it shall be submitted for adjudication to the presidents of the two organizations or their representatives without prejudice to the employees presenting said grievance.



CLAUSE 14, CONFERENCE 1898.

In pricing molding on new stoves, when there are no comparative stoves made in the shop, the prices shall be based upon competitive stoves made in the district, thorough comparison and proper consideration being given to the merits of the work according to labor involved.

AMENDMENT TO CLAUSE 9, CONFERENCE 1896: CLAUSE 15, CONFERENCE 1899.

Stove manufacturers, members of the S. F. N. D. A., shall furnish in their respective foundries a book containing the piece prices for molding, the same to be placed in the care of the foreman of the foundry and a responsible molder agreeable to both employer and employees, said book to be placed in a locker on molding floor, to which the foreman and the molder so elected shall each carry a key.

CLAUSE 16, CONFERENCE 1902.

The general trend of industrial development is towards employing skilled labor, as far as practicable, at skilled work, and in conformance with this tendency every effort should be made by the members of the S. F. N. D. A. and the I. M. U. of N. A. to enable the molder to give seven hours of service per day at molding, and to encourage the use of unskilled help to perform such work as sand cutting and work of like character, when the molder can be given a full day's work.

CLAUSE 17, CONFERENCE 1902.

Inasmuch as it is conceded by the members of the S. F. N. D. A. that the earnings of a molder should exercise no influence upon the molding price of work, which is set, according to well-established precedent and rule of conference agreements, by comparison with other work of a like kind, the placing of a limit upon the earnings of a molder in the seven hours of molding should be discounted in the shops of members of the S. F. N. D. A.

CLAUSE 18, CONFERENCE 1902.

When a full floor of new work is given a molder he should be guaranteed the day-work rate of pay for the first day, in order that he may be given an opportunity to get the job in good running order for piecework; if, however, the molder should earn more than the day-work rate he should be paid his full earnings.

CLAUSE 19, CONFERENCE 1902.

Where a change of job is made the molder often loses considerable time and is put to great inconvenience through the necessary clamps, boards and other facilities needed for the job not being supplied to him promptly. We believe that in well-regulated shops that should be made a feature of the shop management and should be a subject of favorable recommendation to the members of the S. F. N. D. A.

CLAUSE 20, CONFERENCE 1904.

The Iron Molders' Union of North America shall not itself nor by any of its agents in any manner discriminate against the goods manufactured or sold by any member of the Stove Founders' National Defense Association, because of the unwillingness of such member of said association to use the union label, and that a copy of this resolution be duly attested by the presidents and secretaries of the respective organizations, with the seal of each organization attached thereto, and a facsimile thereof be furnished each member of the Stove Founders' National Defense Association and each local of the Iron Molders' Union of N. A.

CLAUSE 21, CONFERENCE 1904.

When the price of piecework has been agreed to between a member of the S. F. N. D. A. or his representative and a price committee representing the molders in his shop, that such prices shall be reduced to writing at that time, and shall be final and binding.



## CLAUSE 22, CONFERENCE 1905.

The general ratio of apprentices to journeymen molders employed in the foundries of members of the S. F. N. D. A. shall be one to five, and one to each shop; provided, however, that whenever a member of the S. F. N. D. A. finds he can not secure the number of molders he may require for the needs of his business, the question shall be referred to the presidents of the two associations, or their representatives, for investigation and relief. If it is found that the member of the S. F. N. D. A. is entitled to relief he shall be allowed such additional number of apprentices as shall be mutually agreed upon.

The number of apprentices shall be computed upon the number of floors being operated by journeymen molders, it being understood that when the force of molders is increased said increase shall have been in existence not less than eight weeks previous to the employment of additional apprentices.

In shops where the ratio at present is more than one to five the ratio agreed upon shall be reached by refraining from placing new apprentices at work until such time as the present number of apprentices employed shall have been reduced to the proper number, and that in the shops where the present ratio is less than one to five no journeyman molder shall be discharged or laid off for the purpose of supplanting him by an additional apprentice.

## CLAUSE 23, CONFERENCE 1905.

Molders who may be employed as "cat skimmers" shall receive fifteen per cent premium on the piece price for the first three days; and thereafter, while employed on the same job, shall be paid the regular rate of piece prices.

By a "cat skinner" is meant only such molder as is temporarily employed to work on a floor that is temporarily vacant through the absence of the molder who is regularly employed upon said floor.

## CLAUSE 24, CONFERENCE 1905.

Recognizing the desirability of introducing new methods and machines in stove foundries, it is agreed by the conferees of the I. M. U. of N. A. and of the S. F. N. D. A. that such processes are entitled to and should have consideration in fixing prices and wages.

## CLAUSE 25, CONFERENCE 1905.

When a stove is to be priced a list shall be furnished the committee of all pieces that belong to the stove, whether some of such pieces have been priced previously or not, so that the committee shall know what pieces go to the stove, and such pieces as have been already priced can be so marked, and all prices, when agreed upon by a committee of molders and a representative of the employer, to be dated and signed by both parties.

**APPENDIX 2.—AGREEMENT ENTERED INTO BETWEEN THE STOVE FOUNDERS' NATIONAL DEFENSE ASSOCIATION AND THE METAL POLISHERS, BUFFERS, PLATERS, BRASS MOLDERS, AND BRASS WORKERS' INTERNATIONAL UNION OF NORTH AMERICA.**

With the view of promoting harmony between the members composing the Stove Founders' National Defense Association and the Metal Polishers, Buffers and Platers' International Union in all matters affecting their joint interests, and providing the means for adjusting any grievances that may arise, we hereby signify our desire to adopt the principle of conciliation and arbitration upon equitable lines, in such form and manner as may hereafter be mutually agreed upon, and we recommend as follows:

## CLAUSE 1, 1902.

That a conference committee be formed, consisting of six members, three of whom shall be appointed by each organization, to hold office for one year, or until their successors are appointed.



## CLAUSE 2, 1902.

Whenever there is a dispute between a member of the S. F. N. D. A. and the M. P. B. & P. U., (when a majority of the metal polishers, buffers and platers in his employ are members of the said union) and it can not be settled amicably between them, it shall be referred to the presidents of the two associations before named, who shall themselves, or by delegates, give it due consideration. If they can not decide it satisfactorily themselves they may, by mutual agreement, summon the conference committee, to whom the dispute shall be referred, and whose decision, by a majority vote, shall be final and binding upon each party for the term of twelve months.

Pending adjudication by the presidents and conference committee neither party to the dispute shall discontinue operations, but shall proceed with business in the ordinary manner. In case of vacancy in the committee of conference, it shall be filled by the association originally nominating. No vote shall be taken except by a full committee or by an even number of each party.

## CLAUSE 3, 1903.

That the general rate of wages for polishers, buffers and platers should be established for each year without change.

## CLAUSE 4, 1903.

When the members of the S. F. N. D. A. shall desire a general reduction in the rate of wages, or the M. P. B. and P. U. of N. A. an advance, each shall give the other at least thirty days' notice before the end of each year, which shall commence on the first day of July. If no such notice be given the rate of wages current during the year shall be the rate in force for the succeeding year.

### **APPENDIX 3.—CONFERENCE AGREEMENTS IN FORCE AND RULING BETWEEN THE STOVE MOUNTERS' INTERNATIONAL UNION OF NORTH AMERICA AND THE STOVE FOUNDERS' NATIONAL DEFENSE ASSOCIATION.**

With the view of promoting harmony between the members composing the Stove Founders' National Defense Association and the Stove Mounters' International Union of N. A. in all matters affecting their joint interests, and providing the means for adjusting any grievances that may arise, we hereby signify our desire to adopt the principle of conciliation and arbitration upon equitable lines, in such form and manner as may be hereafter mutually agreed upon, and we recommend as follows:

## CLAUSE 1, 1902.

That a conference committee be formed, consisting of six members, three of whom shall be appointed by each organization to hold office for one year or until their successors are appointed.

## CLAUSE 2, 1902.

Whenever there is a dispute between a member of the S. F. N. D. A. and the mounters in his employ (when a majority of the latter are members of the S. M. I. U. of N. A.), and it can not be settled amicably between them, it shall be referred to the presidents of the two associations before named, who shall themselves or by delegates give it due consideration. If they can not decide it satisfactorily to themselves they may, by mutual agreement, summon the conference committee, to whom the dispute shall be referred, and whose decision by a majority vote shall be final and binding upon each party for the term of twelve months.

Pending adjudication by the presidents and conference committee neither party to the dispute shall discontinue operations, but shall proceed with business in the ordinary manner. In case of a vacancy in the committee of conference, it shall be filled by the association originally nominating. No vote shall be taken except by a full committee, or by an even number of each party.



## CLAUSE 3, 1903.

The general rate of mounters' wages should be established for each year without change.

## CLAUSE 4, 1903.

When the members of the Defense Association shall desire a general reduction in the rate of wages or the Mounters' Union an advance, they shall each give the other notice at least thirty days before the end of each year, which shall commence on the first day of June. If no such notice be given, the rate of wages current during the year shall be the rate in force for the succeeding year.

## CLAUSE 5, 1903.

The present established price of work in any shop shall be the basis for the determination of the price of new work of similar character and grade, unless the presidents of the two organizations or their representatives shall decide that the established prices of similar work in the shop are not in accord with the price of competitive goods in the district.

## CLAUSE 6, 1903.

No deductions from wages shall be made for broken castings, excepting in case of gross carelessness.

## CLAUSE 7, 1903.

That new patterns for stoves should be refitted from first stove made, which should be mounted by pattern fitter or foreman, or other competent man. The next stove made from these refitted patterns should be mounted in the same manner and necessary fitting done. After this, work on the new stove should be paid for at the regular rate of day wages in the shop, not longer than three days, and then by the piece in piecework shops, unless it is shown that the necessary fitting has not been done, when the stove shall remain in day work until properly fitted.

In case of a disagreement, the price as finally settled shall apply from time first work is done by the piece.

The price should be settled in a reasonable time; two weeks, under ordinary circumstances, would be considered a reasonable time, the price offered by the manufacturer to be paid in the meantime.



## LAWS RELATING TO THE EMPLOYMENT OF CHILDREN IN THE UNITED STATES.

Bulletin No. 52 of this Bureau, issued in May, 1904, contained a compilation of the laws relating to child labor in force at the close of the year 1903. Numerous changes have been made within the past two years, and the general interest in the subject is deemed sufficient to warrant a reproduction of this body of legislation, incorporating the recent amendments and additions thereto. The session laws of all the States having regular sessions of their legislature in 1904 and in 1905 have been examined, except those of Arkansas, session of 1905, which had not been received at the date of publication of this bulletin.

Decisions by the higher State courts as to the construction and application of child-labor laws are not numerous, partly because of the comparatively recent date of their enactment, and partly, perhaps, on account of the methods of enforcement that are prescribed in many instances. The constitutionality of such statutes is generally admitted. Such opinions of the higher courts as have come to the knowledge of this office have been examined, and brief statements of the points determined are appended to the acts or sections which were the subjects of judicial consideration.

In a few instances laws apparently superseded by later enactments have been omitted, even though they appeared in the volumes consulted in preparing this compilation.

### ALABAMA.

#### CODE OF 1896

##### CIVIL CODE.

##### *Employment in mines.*

SECTION 2933. No woman, nor any boy under the age of twelve years, shall be employed to work or labor in or about any mine in this State.

#### ACTS OF 1903.

##### Act No. 57.—*Age limit—Night work—Hours of labor.*

SECTION 1. No child under the age of twelve (12) years shall be employed in or about any factory or manufacturing establishment within this State unless a widowed mother or aged or disabled father is dependent upon the labor of such child, or in case a child is an orphan and has no other means of support. No child under the age of ten (10) years shall be so employed under any circumstances.



SEC. 2. It shall be unlawful for any factory or manufacturing establishment to hire or to employ any child unless there is first provided and placed on file in the office of such employer an affidavit signed by the parent or guardian or person standing [in] parental relation thereto, certifying the age and date of birth of said child; any person knowingly furnishing a false certificate of the age of such child shall be deemed guilty of a misdemeanor, and shall be brought before some justice of the peace or other court or officer having jurisdiction for trial, and upon conviction shall be punished by a fine of not less than five nor more than one hundred dollars, or be sentenced to hard labor for a term not exceeding three months.

SEC. 3. No child under the age of thirteen (13) years shall be employed at labor or detained in any factory or manufacturing establishment in this State between the hours of 7 p. m. and 6 a. m. standard time and no child under the age of sixteen (16) years shall be so employed or detained between said hours for more than forty-eight hours in any one week; and no child under the age of twelve shall be employed or detained in any factory or manufacturing establishment for more than sixty-six (66) hours in any one week.

SEC. 4. Any person, persons or corporation or representative of such corporation who violates any of the provisions of this act, or who willfully or knowingly suffers or permits any child to be employed in violation of its provisions, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not more than (\$200) two hundred dollars.

ACT No. 229.—*Employment while parent lives in idleness.*

SECTION 1. \* \* \* Any person who is able to work, and who does not work but hires out his minor children and lives upon their wages; \* \* \* is hereby declared to be a vagrant and must on conviction be fined not more than five hundred (\$500) dollars and may also be imprisoned in the county jail or sentenced to hard labor for the county for not more than six months: *Provided*, That it shall be a sufficient defense to the charge of vagrancy under any of the provisions of this act that the defendant has made bona fide efforts to obtain employment at reasonable prices for his labor, and has failed to obtain the same. The provisions of this act shall not apply to persons who are idle under strike orders or lockouts.

**ARKANSAS.**

DIGEST OF 1904.

*Age limit—Hours of labor—School attendance.*

SECTION 1947. No child under the age of twelve years shall be employed in or about any factory or manufacturing establishment within this State, unless a widowed mother or totally disabled father is dependent upon the labor of such child, or in case a child is an orphan and has no other means of support. No child under the age of ten years shall be so employed under any circumstances.

SEC. 1948. It shall be unlawful for any factory or manufacturing establishment to hire or employ any child unless there is first provided and placed on file in the office of such employer an affidavit signed by the parent or guardian or person standing in parental relation thereto, certifying the age and date of birth of said child; any person knowingly furnishing a false certificate of the age of such child shall be deemed guilty of perjury and upon conviction thereof shall be punished as provided by law in all cases of perjury.

SEC. 1949. No child under the age of fourteen shall be employed at labor or detained in any factory or manufacturing establishment in this State between the hours of 7 p. m. and 6 a. m. or for more than sixty hours in any one week or more than ten hours in any one day.

SEC. 1950. No child under the age of fourteen shall be employed at labor in or about any factory or manufacturing establishment unless he or she can read and write his or her name and simple sentences in the English language.

SEC. 1951. No child under the age of fourteen years shall be employed at labor in or about any factory or establishment, unless such child attends school for at least twelve weeks of each year—six weeks of said schooling to be consecutive—the year to be counted from the last birthday of the child preceding such employment; and at the end of every year a certificate to the effect that the law has been complied with, signed by the teacher of the school or schools attended by the child during said year must be produced by the parent or person standing



in parental relation to said child, and filed by the employer of said child. All such certificates shall be open to public inspection.

SEC. 1952. Any person, persons, corporation or representative of such corporation who violates any of the provisions of this act, or who suffers or permits any child to be employed in violation of its provisions, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not more than five hundred dollars.

*Employment in mines.*

SECTION 5343. No person under the age of fourteen years, or female of any age, shall be permitted to enter any mine to work therein; nor shall any boy under the age of sixteen years, unless he can read and write, be allowed to work in any mine, and no owner, agent or operator of any mine operated by a shaft or slope shall place in charge on any engine whereby men are lowered into or hoisted out of the mines, any but an experienced, competent and sober person, not under eighteen years of age. \* \* \*

**CALIFORNIA.**

DEERING'S CODES AND STATUTES—1885.

VOL. II.—CIVIL CODE.

*Earnings of minors.*

SECTION 212. The wages of a minor employed in service may be paid to him until the parent or guardian entitled thereto gives the employer notice that he claims such wages.

VOL. IV.—PENAL CODE.

*Certain employments forbidden.*

SECTION 272 (as amended by chapter 158, Acts of 1901, and chapter 568, Acts of 1905). Any person, whether as parent, relative, guardian, employer, or otherwise, having the care, custody, or control of any child under the age of sixteen years, who exhibits, uses, or employs, or in any manner, or under any pretense, sells, apprentices, gives away, lets out, or disposes of any such child to any person, under any name, title, or pretense, for or in any business, exhibition, or vocation, injurious to the health or dangerous to the life or limb of such child, or in or for the vocation, occupation, service, or purpose of singing, playing on musical instruments, rope or wire walking, dancing, begging, or peddling, or as a gymnast, acrobat, contortionist, or rider, in any place whatsoever, or for or in any obscene, indecent or immoral purposes, exhibition, or practice whatsoever, or for or in any mendicant or wandering business whatsoever, or who causes, procures, or encourages such child to engage therein is guilty of a misdemeanor, and punishable by a fine of not less than fifty nor more than two hundred and fifty dollars, or by imprisonment in the county jail for a term not exceeding six months, or by both such fine and imprisonment. Nothing in this section contained applies to or affects the employment or use of any such child, as a singer or musician in any church, school, or academy, or the teaching or learning of the science or practice of music; or the employment of any child as a musician at any concert or other musical entertainment, on the written consent of the mayor of the city or president of the board of trustees of the city or town where such concert or entertainment takes place.

SEC. 273 (added by chapter 158, Acts of 1901, and chapter 568, Acts of 1905). Every person who takes, receives, hires, employs, uses, exhibits, or has in custody, any child under the age, and for any of the purposes mentioned in the preceding section, is guilty of a like offense, and punishable by a like punishment as therein provided.

SEC. 273 [*sic*] (added by chapter 75, Acts of 1905). Any person whether as parent, guardian, employer, or otherwise, and any firm or corporation, who as employer or otherwise, shall send, direct, or cause to be sent or directed to any saloon, gambling house, house of prostitution, or other immoral place, any minor under the age of eighteen years, is guilty of a misdemeanor.



SEC. 273e (added by chapter 158, Acts of 1901, and chapter 568, Acts of 1905). Every telephone, special-delivery company or association, and every other corporation or person engaged in the delivery of packages, letters, notes, messages, or other matter, and every manager, superintendent, or other agent of such person, corporation, or association, who sends any minor in the employ or under the control of any such person, corporation, association, or agent, to the keeper of any house of prostitution, variety theater, or other place of questionable repute, or to any person connected with, or any inmate of, such house, theater, or other place, or who permits such minor to enter such house, theater, or other place, is guilty of a misdemeanor.

#### ACTS OF 1905.

##### CHAPTER 18.—*Hours of labor—Age limit—School attendance.*

SECTION 1. No minor under the age of eighteen shall be employed in laboring in any manufacturing, mechanical, or mercantile establishment, or other place of labor, more than nine hours in one day, except when it is necessary to make repairs to prevent the interruption of the ordinary running of the machinery, or when a different apportionment of the hours of labor is made for the sole purpose of making a shorter day's work for one day of the week; and in no case shall the hours of labor exceed fifty-four hours in a week.

SEC. 2. No minor under the age of sixteen years shall be employed or permitted to work in any mercantile institution, office, laundry, manufacturing establishment, or workshop, between the hours of ten o'clock in the evening and six o'clock in the morning.

No child under fourteen years of age shall be employed in any mercantile institution, office, laundry, manufacturing establishment, workshop, restaurant, hotel, apartment house, or in the distribution or transmission of merchandise or messages.

*Provided*, That the judge of the juvenile court of the county, or city and county, or in any county or city and county in which there is no juvenile court, then any judge of the superior court of the county, or city and county in which such child resides, shall have authority to issue a permit to work to any such child over the age of twelve years, upon a sworn statement being made to him by the parent of such child that such child is past the age of twelve years, that the parents or parent of such child are incapacitated for labor, through illness, and after investigation by a probation officer or truant officer of the city, or city and county, in which such child resides, or in cities and counties where there are no probation or truant officers, then by such other competent persons as the judge may designate for this purpose. The permit so issued shall specify the kind of labor and the time for which it is issued, and shall in no case be issued for a longer period than shall seem necessary to the judge issuing such permit. Such permit shall be kept on file by the person, firm or corporation employing the child therein designated, during the term of said employment, and shall be given up to said child upon his quitting such employment. Such certificate shall be always open to the inspection of the truant and probation officers of the city and county, city or county, in which the place of employment is situated or of the officers of the State bureau of labor statistics.

*And provided*, That any such child, over the age of twelve years, may be employed at any of the occupations mentioned in this act during the regular vacation of the public schools of the city, county, or city and county in which the place of employment is situated, upon the production of a permit signed by the principal of the school which such child has attended during the term next preceding any such vacation. Such permit shall contain the name and age of the child to whom it is issued, and the date of the termination of the vacation for which it is issued, and shall be kept on file by the employer during the period of employment, and at the termination of such employment shall be returned to the child to whom it was issued.

No minor who is under sixteen years of age shall be employed or permitted to work at any gainful occupation during the hours that the public schools of the city, town or school district in which his place of employment is situated are in session, unless he or she can read English at sight and can write legibly and correctly simple English sentences, or unless he or she is a regular attendant for the then current term at a regularly conducted night school. A certificate of the principal of such school shall be held to be sufficient evidence of such attendance.



SEC. 3. Every person, firm, or corporation employing minors under eighteen years of age, in any manufacturing establishment, shall post, and keep posted, in a conspicuous place in every room where such help is employed, a written or printed notice stating the number of hours per day for each day of the week required of such persons.

Every person, firm, corporation, agent or officer of a firm or corporation employing or permitting minors under sixteen years and over fourteen years of age to work in any mercantile institution, office, laundry, manufacturing establishment, workshop, restaurant, hotel, apartment house, or in the distribution or transmission of merchandise or messages, shall keep a record of the names, ages, and places of residence of such minors, and shall have on file a certificate of age and schooling, as provided in this act, for every such minor so employed, said record and certificate to be open at all times to the inspection of those whose duty it is to enforce the provisions of the act.

An age and schooling certificate shall be approved only by the superintendent of schools of the city or city and county, or by a person authorized by him, in writing, or where there is no city or city and county superintendent of schools, by a person authorized by the local school trustees: *Provided*, That the superintendent or principal of any school of recognized standing shall have the right to approve an age and schooling certificate, and shall have the same rights and powers as the superintendent of public schools to issue the certificate herein provided, for children attending such schools. The persons authorized to issue age and schooling certificates shall have the authority to administer the oaths necessary for carrying out the provisions of this act, but no fee shall be charged for issuing such certificates.

An age and schooling certificate shall not be approved unless satisfactory evidence is furnished by the last school census, the certificate of birth or baptism of such child, the public register of birth of such child, or in some other manner, that such child is of the age stated in the certificate.

A duplicate copy of each age and schooling certificate granted under the provisions of this act shall be kept by the person issuing such certificate, such copy to be filed with the county superintendent of schools in the county where the certificate was issued: *Provided*, That all such copies of certificates issued between June 25th and December 25th of any year shall be filed not later than December 31st of such year, and those issued between December 25th and June 25th of the ensuing year shall be filed not later than June 30th of each year. Such certificate shall be substantially in the following form, to wit:

#### AGE AND SCHOOLING CERTIFICATE.

This certifies that I am the (father, mother, or guardian) of (name of child), and that (he or she) was born at (name of town or city), in the county of (name of county) (if known) and State (or country) of (name). on the (day and year of birth), and is now (number of years and of months) old.

(Signature as provided in this act.)

(Town or city, and date.)

There personally appeared before me the above-named (name of person signing) and made oath that the foregoing certificate by (him or her) signed is true to the best of (his or her) knowledge and belief.

I hereby approve the foregoing certificate of (name of child) height (feet and inches), complexion (fair or dark), hair (color), having no sufficient reason to doubt that (he or she) is of the age therein certified, and I hereby certify that (he or she) can or can not read English at sight, and can or can not write legibly simple sentences in the English language.

(Signature of the person authorized to sign, with his official character and authority.)

(Town or city, and date.)

This certificate belongs to, the person in whose behalf it is drawn, and it shall be surrendered to (him or her) whenever (he or she) leaves the services of the person, firm, or corporation holding the same.

The certificate as to the birthplace and age of the minor under sixteen and over fourteen years of age shall be signed by his father, his mother, his guardian; if a child has no father, mother, or guardian living in the same city or town, his own signature to the certificate may be accepted by the person authorized to approve the same.

Every person authorized to sign the certificate prescribed by this act, who knowingly certifies to any false statement therein, is guilty of a misdemeanor



and upon conviction thereof shall be fined not less than five nor more than fifty dollars, or imprisoned not more than thirty days, or by both such fine and imprisonment.

SEC. 4. Any person, firm, corporation, agent, or officer of a firm or corporation that violates or omits to comply with any of the foregoing provisions of this act, or that employs, or suffers, or permits any minor to be employed in violation thereof, is guilty of a misdemeanor and shall, on conviction thereof be punished by a fine of not less than fifty dollars or more than two hundred dollars, or by imprisonment for not more than sixty days, or by both such fine and imprisonment, for each and every offense. A failure to produce any age and schooling certificate or permit, or to post any notice required by this act, shall be prima facie evidence of the illegal employment of any person whose age and schooling certificate or permit is not produced, or whose name is not so posted. Any fine collected under the provisions of this act shall be paid into the school funds of the county, or city and county, in which the offense occurred.

SEC. 5. Nothing in this act shall be construed to prohibit the employment of minors at agricultural, horticultural, viticultural or domestic labor, during the time the public schools are not in session, or during other than school hours.

SEC. 6. It shall be the duty of the commissioner of the bureau of labor statistics to enforce the provisions of this act. But any person may lay an information before a magistrate of the commission of any public offense defined in this act.

## COLORADO.

### CONSTITUTION.

#### ARTICLE 16.—*Employment in mines.*

SECTION 2. The general assembly \* \* \* shall prohibit the employment in the mines of children under twelve years of age.

#### MILLS' ANNOTATED STATUTES OF 1891.

#### *Employment while school is in session.*

SECTION 417. It shall be unlawful for any person, persons or corporation to employ any child under the age of fourteen to labor in any business whatever during the school hours of any school day of the school term of the public school in the school district where such child is, unless such child shall have attended some public or private day school where instruction was given by a teacher qualified to instruct in those branches required to be taught in the public school of the State of Colorado, or shall have been regularly instructed at home in such branches, by some person qualified to instruct in the same, at least twelve weeks in each year, eight weeks at least of which shall be consecutive, and shall, at the time of such employment, deliver to the employer a certificate in writing, signed by the teacher, certifying to such attendance or instruction; and any person, persons or corporation who shall employ any child contrary to the provisions of this section shall, upon conviction, be deemed guilty of a misdemeanor, and fined in a sum not less than twenty-five (25) dollars nor more than fifty (50) dollars, and all fines so collected shall be paid into the county treasury, and placed to the credit of the school district in which the offense occurs.

SEC. 420. It shall be the duty of any school director of the district to inquire into all cases of neglect of the duty prescribed in this act, and ascertain from the person neglecting, the reason, if any, therefor; and he shall forthwith proceed to secure the prosecution of any offense occurring under this act; and any director neglecting to secure such prosecution for such offense, within ten days after a written notice has been served on him by any taxpayer in said district, unless the person so complained of shall be excused by the district board of education for the reasons hereinbefore stated, shall, upon conviction, be deemed guilty of a misdemeanor, and fined in a sum not less than ten nor more than fifty dollars; and such fine, when collected, shall be paid into the county treasury and placed to the credit of the school district in which the offense occurs. All actions for offenses committed under this act shall be prosecuted for in the name of the State of Colorado.

SEC. 422. Two weeks' attendance, at half time or night school, shall be considered within the meaning of the article equivalent to an attendance of one week at a day school.



*Employment in mines.*

SECTION 3185. \* \* \* No young person under twelve years of age, or woman or girl of any age, shall be permitted to enter any coal mine to work therein, nor any person under the age of 16 years, unless he can read and write.

## ACTS OF 1891.

*Certain employments forbidden.*

(Page 59. Act approved April 13, 1891.)

SECTION 1. It shall be unlawful for any person having the care, custody or control of any child under the age of fourteen years, to exhibit, use or employ as an actor or performer in any concert hall or room where intoxicating liquors are sold or given away, or in any variety theater, or for any illegal, obscene, indecent or immoral purpose, exhibition or practice whatsoever, or for or in any business, exhibition or vocation injurious to the health or dangerous to the life or limb of such child, or cause, procure or encourage such child to engage therein. Nothing in this section contained shall apply to or affect the employment or use of any such child as a singer or musician in any church, school or academy, or at any respectable entertainment, or the teaching or learning the science or practice of music.

SEC. 2. It shall also be unlawful for any person to take, receive, hire, employ, use, exhibit or have in custody any child under the age and for the purpose prohibited in the first section of this act.

SEC. 5. Any person who shall be convicted of violating any of the provisions of the preceding sections of this act, shall be fined not exceeding one hundred dollars, or be imprisoned in the county jail not exceeding three months, or both, in the discretion of the court; and upon conviction for a second or any subsequent offense, shall be fined not exceeding two hundred dollars, or be imprisoned in the county jail not exceeding six months.

*Age of employment of telegraph operators on railroads.*

(Page 280. Act approved April 3, 1891.)

SECTION 1. No railroad company operating a line or lines of railroad within this State shall hire or employ any person or persons as telegraph operators for the purpose of receiving or transmitting telegraph messages or train orders for the movement of trains, unless said person or persons are at least eighteen (18) years of age, and who have had not less than one year's experience as a telegraph operator.

SEC. 2. Any railroad company, its officers or agents, violating the provisions of this act, shall be guilty of a misdemeanor, and shall be fined not less than one hundred dollars (\$100) nor more than one thousand dollars (\$1,000) for each and every offense.

## ACTS OF 1899.

CHAPTER 136.—*Employment during school term—Illiterates.*

SECTION 1. In districts of the first and second class in this State \* \* \* every parent, guardian or other person having charge of any child between the ages of 8 and 14 years, shall send such child to a public, private or parochial school for the following period: In each school year beginning in September, not less than 20 weeks, at least 10 weeks of which, commencing within the first four weeks of the school year, shall be consecutive: *Provided, however,* That if two reputable physicians within the district shall certify in writing that the child's bodily or mental condition does not permit of its attendance at school, such child shall be exempted during such period of disability from the requirements of this act: *And, provided, further,* That if, in the opinion of the county superintendent of schools, the child is being instructed at home by a person qualified, such a child shall not be required to attend as herein provided. \* \* \*

SEC. 2. No child under the age of 14 years shall be employed by any person, persons, company or corporations during the school term and while the public schools are in session, unless the parent, guardian or person in charge of such child shall have fully complied with section one of this act. Every such em-



ployer shall require proof of such compliance, and shall make and keep a written record of the proof given, which shall be subject to the inspection of the truant officer, superintendent of schools, or any school director of the district. Any employer employing any child contrary to the provisions of this section, shall be fined not less than twenty-five nor more than one hundred dollars.

SEC. 3. All minors over the age of 14 years and under the age of 16 years who can not read and write the English language, shall attend school at least one-half day of each day, or attend a public night school, or take regular private instruction from some person qualified, in the opinion of the county superintendent of schools, in which such district or the greater portion of the same lies, until such minor obtains a certificate from such superintendent that he or she can read at sight and write legibly, simple sentences in English. Every employer employing or having in employment any such minor shall exact as a condition of employment the school attendance or instruction required by this section, and shall on request of the truant officer, furnish the evidence that such minor is complying with the requirements of this section. Every employer failing to comply with the requirements of this section as to any minor employed by him or in his employ, shall be fined not less than twenty-five dollars, and not more than one hundred dollars: *Provided*, That any employer with the approval or consent of the county superintendent of schools may make provision for the private instruction of minors in his employ.

## ACTS OF 1903.

### CHAPTER 138.—*Hours of labor—Age limit.*

SECTION 1. It shall be unlawful for any person, agent, firm, company, copartnership, or corporation to require any child, either boy or girl, of sixteen years of age or less, to labor or work in any mill, factory, manufacturing establishment, shop or store, or in or about coal or other mines, or any other occupation not herein enumerated which may be deemed unhealthful or dangerous, for a greater number than eight hours in the twenty-four hour day, except in cases where life or property is in imminent danger, or in the week before and following Christmas day: *Provided*, That any child between the age of fourteen and sixteen years coming within the provisions of this act may be exempted from the provisions thereof, if in the opinion of the judge of the county court of the county in which said child resides it would be for its best interests to be so exempted. Application may be made in writing to any county judge by any such child, its parent or guardian, to be granted such exemption, when it shall be the duty of such judge to hear the same and inquire particularly into the nature of the employment sought. No fees shall be charged or collected in any such case.

SEC. 2. All paper mills, cotton mills and factories where wearing apparel for men or women is made, ore reduction mills or smelters, factories, shops of all kinds and stores may be held to be unhealthful and dangerous occupations within the meaning of this act at the discretion of the court.

SEC. 4. Any person who shall take, receive, hire or employ any child under the age of fourteen years in any underground works or mine, or in any smelter, mill or factory, shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not less than fifty dollars, nor more than five hundred dollars, and shall be imprisoned in the county jail not less than thirty days, nor more than three months.

The phrase, "any person," applies to corporations as well as to individuals, and corporations are liable for the unlawful employment of a child even though the employing official had been instructed not to employ any one under the prohibited age. 75 Pac. Rep., 924.

SEC. 5. Any person, agent, firm, company, copartnership or corporation which shall violate any of the provisions of this act or shall require a greater number of hours of work or labor than herein specified of any child, either boy or girl, of sixteen years of age or less, in any employment or occupation herein enumerated, or any other which shall be deemed by the courts as unhealthful, shall be deemed guilty of a misdemeanor, and shall be fined in a sum of not less than one hundred dollars (\$100), or more than five hundred dollars (\$500), or be imprisoned in the county jail for not less than two, or more than four months, or by both such fine and imprisonment, in the discretion of the court, for each offense.



SEC. 6. All district attorneys shall be required to make prosecutions for all violations of this act, upon the sworn complaint of any reputable citizen that this act is being violated by any person, firm, company, copartnership or corporation.

### CONNECTICUT.

#### GENERAL STATUTES OF 1902.

##### *Certain employments forbidden.*

SECTION 1163. Every person who shall exhibit, use, employ, apprentice, give away, let out, or otherwise dispose of any child under the age of twelve years, in or for the vocation, occupation, service, or purpose of rope or wire walking, dancing, skating, bicycling, or peddling, or as a gymnast, contortionist, rider, or acrobat, in any place whatever; or for or in any obscene, indecent, or immoral purpose, exhibition, or practice, whatsoever; or for or in any business, exhibition, or vocation, injurious to the health, or dangerous to the life or limb of such child; or who shall cause, procure, or encourage any such child to engage therein, shall be fined not more than two hundred and fifty dollars, or imprisonment not more than one year, or both. But nothing herein shall prevent the employment of any such child as a singer or musician, in any church or school, or in learning or teaching the science or practice of music.

##### *Employment during school time—Illiterates.*

SECTION 2119. Every person who shall employ a child under fourteen years of age during the hours while the school which such child should attend is in session, and every person who shall authorize or permit on premises under his control any such child to be so employed, shall be fined not more than twenty dollars for every week in which such child is so employed.

SEC. 2120. Every parent or other person, having control of a child, who shall make any false statement concerning the age of such child with intent to deceive the town clerk or registrar of births, marriages, and deaths of any town, or the teacher of any school, or shall instruct a child to make any such false statement, shall be fined not more than twenty dollars.

SEC. 2121. The school visitors or the town school committee in every town shall, once or more in every year, examine into the situation of the children employed in all manufacturing establishments, and ascertain whether all the provisions of this chapter are duly observed, and report all violations thereof to the prosecuting authority.

SEC. 2147. No person over fourteen and under sixteen years of age, who can not read and write, shall be employed in any town where public evening schools are established unless he can produce every school month of twenty days a certificate from the teacher of an evening school showing that he has attended such school eighteen consecutive evenings in the current school month, and is a regular attendant. Every person who shall employ a child contrary to the provisions of this section shall be fined not more than fifty dollars, and the State board of education shall enforce the provisions of this section as provided in section 4707.

##### *Employment on elevators.*

SECTION 2614. No person, partnership, or corporation shall permit or employ a person under the age of sixteen years to have the care, custody, operation, or management of an elevator. Every person, partnership, or corporation violating any provision of this section shall forfeit not more than twenty-five dollars for each offense.

##### *Employment in barrooms, etc.*

SECTION 2682. No person having a license under the provisions of this title shall employ any minor as bartender, porter, or in any other capacity, in any saloon where spirituous and intoxicating liquors are kept for sale, and upon such employment the county commissioners shall revoke the license of such person.

\* \* \*

##### *Hours of labor—Age limit.*

SECTION 4691. No minor under sixteen years of age \* \* \* shall be employed in laboring in any manufacturing, mechanical, or mercantile establish-



ment more than ten hours in any day, except when it is necessary to make repairs to prevent the interruption of the ordinary running of the machinery, or where a different apportionment of the hours of labor is made for the sole purpose of making a shorter day's work for one day of the week. Every employer shall post in a conspicuous place in every room where such persons are employed a notice stating the number of hours of work required of them on each day of the week, and the employment of any such person for a longer time in any day than so stated shall be a violation of this section, unless it appears that such employment is to make up for time lost on some previous day of the same week in consequence of the stopping of machinery upon which such person was employed or dependent for employment; but in no case shall the hours of labor exceed sixty in a week. Every person who willfully employs, or has in his employment, or under his charge, any person in violation of this section, and every parent or guardian who permits any such minor to be so employed, shall be fined not more than twenty dollars for each offense. A certificate of the age of a minor, made as provided in section 4705, shall be conclusive evidence of his age upon the trial of any person other than the parent or guardian for violation of any provision of this section.

SEC. 4704. No child under fourteen years of age shall be employed in any mechanical, mercantile, or manufacturing establishment.

SEC. 4705 (as amended by chapter 115, Acts of 1905). Every person or corporation employing a child under sixteen years of age in any mechanical, mercantile, or manufacturing establishment shall obtain a certificate showing that the child is over fourteen years of age. Such certificate shall be signed by the registrar of births, marriages, and deaths or by the town clerk of the town where the child was born, or by a teacher of the school which the child last attended, or by the person having custody of the register of said school. If a child was not born in the United States, the State board of education may investigate and, if it appears that said child is over fourteen years of age, may grant a certificate accordingly, and this certificate may be accepted as evidence of age. The parent or guardian of any child shall state, under oath, to the secretary or agent of the State board of education, the date of birth of the child, and shall present any family record, passport, or other documentary evidence which said board may require, showing the age of the child. The said secretary or agents may administer the oath required by this section. Every employer or other person having control of any establishment or premises where children under sixteen years of age are employed, who shall neglect to have and keep on file the certificates described in this section, or to show the same, with a list of the names of such children so employed, to the secretary or an agent of the State board of education, or to an agent of the board of school visitors, town school committee, or board of education, as the case may be, of the town in which the establishment or premises are located, when demanded during the usual business hours, shall be fined not more than one hundred dollars.

SEC. 4706. Every person acting for himself, or as agent of a mechanical, mercantile, or manufacturing establishment, who shall employ, authorize, or permit to be employed in such establishment any child, in violation of any provision of section 4704 or 4705, shall be fined not more than sixty dollars, and every week of such illegal employment shall be a distinct offense: *Provided*, That no person shall be punished under this section for the employment of any child, when at the time of such employment the employer shall obtain, and thereafter during such employment keep on file, the certificate provided for in section 4705.

SEC. 4707. It shall be the duty of the State board of education, and the school visitors, boards of education, and town school committees to enforce sections 4704, 4705, and 4706; and for that purpose the State board of education may appoint agents, under its supervision and control, for terms of not more than one year, who shall be paid not to exceed five dollars a day for time actually employed and necessary expenses, and whose accounts shall be approved by said board and audited by the comptroller. The agents so appointed may be directed by said board to enforce the provisions of the law requiring the attendance of children at school and to perform any duties necessary or proper for the due execution of the duties and powers of the board.



## DELAWARE.

## REVISED CODE OF 1852, EDITION OF 1893.

CHAPTER 131.—*Certain employments forbidden.*

[Page 954, chapter 150, vol. 16, Laws of Delaware.]

SECTION 2. Any person having the care, custody, or control of any minor child under the age of fifteen years who shall in any manner sell, apprentice, give away, or otherwise dispose of such minor, or any person who shall take, receive, or employ such child for the vocation or occupation of rope or wire walking or dancing, or as an acrobat or gymnast, or any person who, having the care, custody, or control of any minor child whatsoever, and shall sell, apprentice, give away, or otherwise dispose of such minor, or who shall take, receive, or employ, such minor for begging or any obscure [sic], indecent, or illegal exhibition or vocation, or any vocation injurious to the health or dangerous to the life or limb of such child engaged therein, or for the purpose of prostitution, or any person who shall retain, harbor, or employ any minor child in or about any assignation house or brothel, shall be deemed guilty of a misdemeanor, and upon conviction thereof before any justice of the peace or court of record shall be fined not less than twenty dollars nor more than one hundred dollars for each and every offense.

## ACTS OF 1905.

CHAPTER 123.—*Age limit—School attendance—Hours of labor.*

SECTION 1. From and after the first day of July one thousand nine hundred and five, no child or minor under the age of fourteen years shall be employed in any factory, workshop or establishment where the manufacture of any goods whatever is carried on.

SEC. 2. From and after the first day of July one thousand nine hundred and five no child between the ages of fourteen and sixteen years shall be employed in any factory, workshop or establishment where the manufacture of any kind of goods whatever is carried on, unless such child shall have attended, within twelve months immediately preceding such employment some public, day or night school, or some well recognized school; such attendance to be for five days or evenings every week during a period of at least twelve consecutive weeks which may be divided into two terms of six consecutive weeks, so far as the arrangement of school terms will permit, and unless such child, or his parents or guardians, shall have presented to the manufacturer or other employer seeking to employ such child a certificate giving the names of parents or guardian, the name and number of the school attended, and the number of weeks in attendance such certificate to be signed by the teacher or teachers of such child: *Provided*, That in case the age of the child be not known, such teacher shall certify that the age given is the true age, to the best of his or her knowledge or belief.

SEC. 3. No child or children under the age of sixteen years shall be employed in any factory, workshop or establishment where the manufacture of any kind of goods is carried on for a longer period than nine hours a day or fifty-four hours a week: *And further provided*, That every such child so employed shall be entitled to not less than thirty minutes for meal time at noon, and every employer shall post in a conspicuous place, where such minor children are employed a printed notice, stating that the maximum work hours required in any one week shall not exceed fifty-four hours. The governor shall immediately after the passage of this bill, appoint by and with the advice and consent of the senate some suitable person, who shall be a resident and citizen of this State, who shall be designated and known by the official title of "Factory and workshop inspector," and who shall receive a salary of one thousand dollars per year, payable in equal quarterly installments of two hundred and fifty dollars, and who shall hold office for the term of two years; the said inspector shall be empowered to visit and inspect at all reasonable hours and as often as practicable all factories, workshop's [workshops] and other establishments in this State, where the manufacture or sale of any kind of goods is carried on, and it shall be the duty of the said inspector to enforce the provisions of this act and to prosecute all violations of the same as hereinafter provided, and he shall



have the power to demand a certificate of physical fitness from some regularly licensed physician of the State or county in which such establishment is located in the case of a child under sixteen years of age, who may seem physically unable to perform the labor at which such child may be employed, and the said inspector shall have power to prohibit the employment of any such child under the age of sixteen years, who shall be unable to obtain such certificate.

SEC. 4. It shall be the duty of every person or corporation employing a child or children under the provisions of this act to keep a register, in which shall be recorded the name, age, day of birth and place of residence of every child under the age of sixteen years so employed by such person or corporation, and it shall be unlawful for any person or corporation to employ any minor under the age of sixteen years unless there is furnished to said person or corporation a sworn statement made by the parent or guardian of such minor, stating the name, date and place of birth of such minor.

SEC. 5. Every person, or the officer or officers of any corporation violating the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined a sum not less than fifty dollars nor more than one hundred dollars for each and every such offense.

SEC. 6. It shall be the duty of such factory or workshop inspector appointed under the provisions of this act to inspect the sanitary conditions of any factory workshop or other establishment, wherein minors are employed in accordance with the provisions of this act and to make report in writing of his findings to the governor, to the board of health of the city of Wilmington and the State board of health quarterly, or more frequently if he shall deem it necessary.

SEC. 7. The provisions of this act shall not apply to any person or corporation engaged in the canning or preserving of fruits, vegetables or provisions or in the carrying on of any agricultural business "or to any person or persons, firm or corporation, engaged in the manufacture of fruit and berry baskets."

SEC. 8. In every case where it shall appear to the satisfaction of the inspector appointed under the provisions of this act, that any child or children under the age of sixteen years is a means of support and maintenance of a widowed mother that in every such case, the inspector may in his discretion issue a certificate to such child or children authorizing their employment, any provisions of this act to the contrary notwithstanding.

## DISTRICT OF ALASKA.

### ACTS OF U. S. CONGRESS, 1898-99.

#### CHAPTER 429.—TITLE 2.—*Employment in barrooms.*

SECTION 478.—No licensee under a barroom license shall employ, or permit to be employed, or allow any \* \* \* minor \* \* \* to sell, give, furnish, or distribute any intoxicating drinks or any admixture thereof, ale, wine, or beer to any person or persons. \* \* \*

## DISTRICT OF COLUMBIA.

### CODE.

[Approved March 3, 1901; amended January 31 and June 30, 1902.]

#### *Certain employments forbidden.*

SECTION 814. \* \* \* Any person, having in his custody or control a child under the age of fourteen years, who shall in any way dispose of it with a view to its being employed as an acrobat, or a gymnast, or a contortionist, or a circus rider, or a ropewalker, or in any exhibition of like dangerous character, or as a beggar, or mendicant, or pauper, or street singer, or street musician; or any person who shall take, receive, hire, employ, use, exhibit, or have in custody any child of the age last named for any of the purposes last enumerated, shall be deemed guilty of a misdemeanor, and, when convicted thereof, shall be subject to punishment by a fine of not more than two hundred and fifty dollars, or by imprisonment for a term not exceeding two years, or both.



## FLORIDA.

## REVISED STATUTES OF 1892.

*Consent of parent when employed.*

SECTION 2733. Whoever hires or employs or causes to be hired or employed any minor, knowing such minor to be under the age of fifteen years and under the legal control of another, without the consent of those having such legal control, for more than sixty days, shall be punished by imprisonment not exceeding sixty days or by fine not exceeding twenty dollars.

## GEORGIA.

## CODE OF 1895.

## VOL. II.—CIVIL CODE.

*Age of employment of telegraph operators on railroads.*

SECTION 2237. No railroad company shall employ in this State any telegraph operator to receive and transmit dispatches governing the movement of trains, who is less than eighteen years of age, \* \* \*

SEC. 2238. Any railroad company violating the requirements of the preceding section shall forfeit for each offense not less than fifty dollars, and not more than five hundred dollars.

*Hours of labor—Corporal punishment.*

SECTION 2619. The hours of labor by all persons under twenty-one years of age, in all other [i. e., than cotton or woollen] manufacturing establishments, or machine shops in this State, shall be from sunrise until sunset, the usual and customary times for meals being allowed from the same; and any contract made with such persons or their parents, guardians, or others, whereby a longer time for labor is agreed upon or provided for, shall be null and void, so far as relates to the enforcement of said contracts against such laborers.

SEC. 2620. No boss or other superior in any manufacturing establishment shall inflict corporeal [corporal] punishment upon minor laborers; and the owners of such factory or machine shop shall be directly liable for all such conduct on the part of their employees; and such minor may sue in his own name for damages for such conduct, and the recovery shall be his own property, and not belong to his parents.

## VOL. III.—PENAL CODE.

*Employment in barrooms.*

SECTION 445. If any person keeping or carrying on, either by himself or by another, a barroom, or other place where spirituous liquors are sold by retail to be drunk on the spot, shall employ a minor in such barroom or other place, he shall be guilty of a misdemeanor.

*Employment, while parents live in idleness.*

SECTION 453 (as amended by act, page 109, Acts of 1905).

\* \* \* \* \*

7. All persons who are able to work and do not work, and who have no property or other means of support, but hire out their minor children and live upon their wages, shall be deemed and considered vagrants.

\* \* \* \* \*

*Certain employments forbidden.*

SECTION 706. Any person who shall sell, apprentice, give away, let out, or otherwise dispose of any child under twelve years, to any person, for the vocation, occupation, or service of rope or wire walking, begging, or as a gym-



nast, contortionist, circus rider, acrobat or clown, or for any indecent, obscene or immoral exhibition, practice or purpose, shall be guilty of a misdemeanor.

SEC. 707. Whenever a child shall be disposed of in violation of the preceding section, the person who, under such selling, apprenticing or letting out, shall receive and use such child for any of the purposes condemned in said section, shall be guilty of a misdemeanor.

## HAWAII.

### ACTS OF 1905.

#### Act No. 67.—*Employment in saloons.*

SECTION 12. Licenses shall be subject to the following conditions and provisions:

\* \* \* \* \*

(4) No licensee of the first, second, fourth or fifth class, except such as conduct an hotel business on the same premises, shall employ a minor in or about the room or rooms where intoxicating liquors are manufactured or furnished;

\* \* \* \* \*

## IDAHO.

### CONSTITUTION.

#### ARTICLE 13.—*Employment in mines.*

SECTION 4. The employment of children under the age of fourteen (14) years in underground mines is prohibited.

### CODES—1901.

#### PART II.—CIVIL CODE.

##### *Earnings of minors.*

SECTION 2073. The wages of a minor employed in service may be paid to him, unless within thirty days after the commencement of the service, the parent or guardian entitdel [entitled] thereto gives the employer notice that he claims such wag[e]s.

## ILLINOIS.

### STARR & CURTIS'S ANNOTATED STATUTES OF 1896.

#### CHAPTER 38.—*Certain employments forbidden.*

SECTION 131. It shall be unlawful for any person having the care, custody or control of any child under the age of fourteen years, to exhibit, use or employ, or in any manner, or under any pretense, sell, apprentice, give away, let out or otherwise dispose of any such child to any person in or for the vocation or occupation, service or purpose of singing, playing on musical instruments, rope or wire walking, dancing, begging or peddling, or as a gymnast, contortionist, rider or acrobat in any place whatsoever, or for any obscene, indecent or immoral purpose, exhibition or practice whatsoever, or for, or in any business, exhibition or vocation injurious to the health, or dangerous to the life or limb of such child, or cause, procure or encourage any such child to engage therein. Nothing in this section contained shall apply to, or effect [affect] the employment or use of any such child as a singer or musician in any church, school or academy, or in the teaching or learning the science or practice of music.



## ACTS OF 1899.

*Employment in mines.*

(Page 300.)

SECTION 22 (as amended by act, page 326, Acts of 1905). No boy under the age of sixteen years, and no woman or girl of any age, shall be permitted to do any manual labor in or about any mine, and before any boy can be permitted to work in any mine he must produce to the mine manager or operator thereof an affidavit from his parent or guardian, or next of kin, sworn and subscribed to before a justice of the peace or notary public, that he, the said boy, is sixteen years of age.

## ACTS OF 1903.

*Age limit—Night work—Illiterates—Certain occupations forbidden.*

(Page 187.)

SECTION 1. No child under the age of fourteen years shall be employed, permitted or suffered to work at any gainful occupation in any theater, concert hall or place of amusement where intoxicating liquors are sold, or in any mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, passenger or freight elevator, factory or workshop, or as a messenger or driver therefor, within this State. No child under fourteen years of age shall be employed at any work performed for wages or other compensation, to whomsoever payable, during any portion of any month when the public schools of the town, township, village or city in which he or she resides are in session, nor be employed at any work before the hour of seven o'clock in the morning or after the hour of six o'clock in the evening: *Provided*, That no child shall be allowed to work more than eight hours in any one day.

Where a child is employed in violation of this section, the employer is liable for any injury resulting to him so long as he continues in the performance of the work which he was directed to do, even though the negligence of the child may have contributed to the accident.

That the child falsely represented that he was of legal age is not a defense. An employer must ascertain at his peril that the persons he employs are members of the class that he may lawfully employ. The statute is aimed at the master and not at the servant. 73 N. E. Rep., 766.

SEC. 2. It shall be the duty of every person, firm or corporation, agent or manager of any firm or corporation employing minors over fourteen years and under sixteen years of age in any mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, theater, concert hall or place of amusement, passenger or freight elevator, factory or workshop, or as messenger or driver therefor, within this State, to keep a register in said mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, theater, concert hall or place of amusement, factory or workshop in which said minors shall be employed or permitted or suffered to work, in which register shall be recorded the name, age and place of residence of every child employed or suffered or permitted to work therein, or as messenger or driver therefor, over the age of fourteen and under the age of sixteen years; and it shall be unlawful for any person, firm or corporation, agent or manager, of any firm or corporation to hire or employ, or to permit or suffer to work in any mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, theater, concert hall or place of amusement, passenger or freight elevator, factory or workshop, or as messenger or driver therefor, any child under the age of sixteen years and over fourteen years of age, unless there is first produced and placed on file in such mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, factory or workshop, theater, concert hall or place of amusement, an age and school certificate approved as hereinafter provided.

SEC. 3. Every person, firm or corporation, agent or manager of a corporation employing or permitting or suffering to work five or more children under the age of sixteen years and over the age of fourteen in any mercantile institution, store, office, laundry, hotel, manufacturing establishment, factory or workshop, shall post and keep posted in a conspicuous place in every room in which such help is employed, or permitted or suffered to work, a list containing the name, age



and place of residence of every person under the age of sixteen years employed, permitted or suffered to work in such room.

SEC. 4. No child under sixteen years of age and over fourteen years of age shall be employed in any mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, theater, concert hall, or place of amusement, passenger or freight elevator, factory or workshop, or as messenger or driver therefor, unless there is first produced and placed on file in such mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, theater, concert hall or place of amusement, factory or workshop, and accessible to the State factory inspector, assistant factory inspector or deputy factory inspector, an age and school certificate as hereinafter prescribed; and unless there is kept on file and produced on demand of said inspectors of factories a complete and correct list of all the minors under the age of sixteen years so employed who can not read at sight and write legibly simple sentences, unless such child is attending night school as hereinafter provided.

SEC. 5. An age and school certificate shall be approved only by the superintendent of schools or by a person authorized by him in writing; or where there is no superintendent of schools by a person authorized by the school board: *Provided*, That the superintendent or principal of a parochial school shall have the right to approve an age and school certificate, and shall have the same rights and powers as the superintendent of public schools to administer the oaths herein provided for children attending parochial schools: *Provided, further*, That no member of a school board or other person authorized as aforesaid shall have authority to approve such certificates for any child then in or about to enter his own establishment, or the employment of a firm or corporation of which he is a member, officer or employee. The person approving these certificates shall have authority to administer the oath provided herein, but no fee shall be charged therefor. It shall be the duty of the school board or local school authorities to designate a place (connected with their office, when practicable) where certificates shall be issued and recorded, and to establish and maintain the necessary records and clerical service for carrying out the provisions of this act.

SEC. 6. An age and school certificate shall not be approved unless satisfactory evidence is furnished by the last school census, the certificate of birth or baptism of such child, the register of birth of such child with a town or city clerk, or by the records of the public or parochial schools, that such child is of the age stated in the certificate: *Provided*, That in cases arising wherein the above proof is not obtainable, the parent or guardian of the child shall make oath before the juvenile or county court as to the age of such child, and the court may issue to said child an age certificate as sworn to.

SEC. 7. The age and school certificate of a child under sixteen years of age shall not be approved and signed until he presents to the person authorized to approve and sign the same, a school attendance certificate, as hereinafter prescribed, duly filled out and signed. A duplicate of such age and school certificate shall be filled out and shall be forwarded to the State factory inspector's office. Any explanatory matter may be printed with such certificate in the discretion of the school board or superintendent of schools. The employment and the age and school certificates shall be separately printed and shall be filled out, signed, and held or surrendered as indicated in the following forms:

#### SCHOOL CERTIFICATE.

(Name of school).

(City or town and date).

This certifies (name of minor) of the —th grade, can read and write legibly simple sentences. This also certifies that according to the records of this school, and in my belief, the said (name of minor) was born at (name of city or town) in (name of county) on the (date) and is now (number of years and months) old.

(Name of parent or guardian),  
(Residence).

(Signature of teacher) — grade.

(Name of principal).

Correct. (Name of school).

#### EVENING SCHOOL ATTENDANCE CERTIFICATE.

(Date).

This certifies that (name of minor) is registered in and regularly attends the — evening school. This also certifies that according to the records of my



school and in my belief the said (name of minor) was born at (name of city or town) on the —— day of (year), and is now (number of years and months) old.  
 (Name of parent or guardian),  
 (Residence).  
 (Signature of teacher).  
 (Signature of principal).

## AGE AND SCHOOL CERTIFICATE.

This certifies that I am (father, mother, guardian or custodian) of (name of minor), and that (he or she) was born at (name of town or city) in the (name of county, if known) and State or count[r]y of ——, on the (day of birth and year of birth) and is now (number of years and months) old.  
 (Signature of parent, guardian or custodian).  
 (City or town and date).

There personally appeared before me the above named (name of person signing) and made oath that the foregoing certificate by (him or her) signed is true to the best of (his or her) knowledge. I hereby approve the foregoing certificate of (name of child), height (feet and inches), weight ——, complexion (fair or dark), hair, (color) having no sufficient reason to doubt that (he or she) is of the age therein certified.

## OWNER OF CERTIFICATE.

This certificate belongs to (name of child in whose behalf it is drawn) and is to be surrendered to (him or her) whenever (he or she) leaves the service of the corporation or employer holding the same; but if not claimed by said child within thirty days from such time it shall be returned to the superintendent of schools, or where there is no superintendent of schools, to the school board.  
 (Signature of person authorized to approve and sign, with official character authority) (town, or city and date.)

In the case of a child who can not read at sight and write legibly simple sentences, the certificate shall continue as follows, after the word sentences: "I hereby certify that (he or she) is regularly attending the (name of public or parochial evening school)." This certificate shall continue in force just as long as the regular attendance of said child at said evening school is certified weekly by the teacher and principal of said school.

In any city or town in which there is no public or parochial evening school, an age and school certificate shall not be approved for a child under the age of sixteen years who can not read at sight and write legibly simple sentences. When the public or parochial evening schools are not in session, an age and school certificate shall not be approved for any child who can not read at sight and write legibly simple sentences. The certificate of the principal of a public or parochial school shall be prima facie evidence as to the literacy or illiteracy of the child.

SEC. 8. No person shall employ any minor over fourteen years of age and under sixteen years, and no parent, guardian or custodian shall permit to be employed any such minor under his control, who can not read at sight and write legibly simple sentences, while a public evening school is maintained in the town or city in which such minor resides, unless such minor is a regular attendant at such evening school.

SEC. 9. The State inspector of factories, his assistants or deputies, shall visit all mercantile institutions, stores, offices, laundries, manufacturing establishments, bowling alleys, theaters, concert halls or places of amusement, factories or workshops, and all other places where minors are or may be employed in this State, and ascertain whether any minors are employed contrary to the provisions of this act. Inspectors of factories may require that age and school certificates, and all lists of minors employed in such factories, workshops, mercantile institutions and all other places where minors are employed as provided for in this act, shall be produced for their inspection on demand: *And, provided further,* That upon written complaint to the school board or local school authorities of any city, town, district or municipality, that any minor (whose name shall be given in such complaint) is employed in any mercantile institution, store, office, laundry, manufacturing establishment, bowling alley, theater, concert hall or place of amusement, passenger or freight elevator, factory or workshop, or as messenger or driver therefor, contrary to the provisions of this act, it shall be



the duty of such school board or local school authority to report the same to the State inspector of factories.

SEC. 10. No person under the age of sixteen years shall be employed or suffered or permitted to work at any gainful occupation more than forty-eight hours in any one week, nor more than eight hours in any one day; or before the hours of seven o'clock in the morning or after the hour of seven o'clock in the evening. Every employer shall post in a conspicuous place in every room where such minors are employed, a printed notice stating the hours required of them each day of the week, the hours of commencing and stopping work, and the hours when the time or times allowed for dinner or for other meals begins and ends. The printed form of such notice shall be furnished by the State inspector of factories, and the employment of any such minor for longer time in any day so stated shall be deemed a violation of this section.

SEC. 11. No child under the age of sixteen years shall be employed at sewing belts, or to assist in sewing belts, in any capacity whatever; nor shall any child adjust any belt to any machinery; they shall not oil or assist in oiling, wiping or cleaning machinery; they shall not operate or assist in operating circular or band saws, wood shapers, wool jointers [wood jointers], planers, sandpaper or wood-polishing machinery, emery or polishing wheels used for polishing metal, wood-turning or boring machinery, stamping machines in sheet metal and tinware manufacturing, stamping machines in washer and nut factories, operating corrugating rolls, such as are used in roofing factories, nor shall they be employed in operating any passenger or freight elevators, steam boiler, steam machinery, or other steam generating apparatus, or as pin boys in any bowling alleys; they shall not operate or assist in operating dough brakes, or cracker machinery of any description; wire or iron-straightening machinery; [n]or shall the [they] operate or assist in operating rolling-mill machinery punches or shears, washing, grinding or mixing mill or calendar rolls in rubber manufacturing, nor shall they operate or assist in operating laundry machinery; nor shall children be employed in any capacity in preparing any composition in which dangerous or poisonous acids are used, and they shall not be employed in any capacity in the manufacture of paints, colors or white lead; nor shall they be employed in any capacity whatever in operating or assisting to operate any passenger or freight elevator; nor shall they be employed in any capacity whatever in the manufacture of goods for immoral purposes, or any other employment that may be considered dangerous to their lives or limbs, or where their health may be injured or morals depraved; nor in any theater, concert hall, or place of amusement wherein intoxicating liquors are sold; nor shall females under sixteen years of age be employed in any capacity where such employment compels them to remain standing constantly.

SEC. 12. The presence of any person under the age of sixteen years in any manufacturing establishment, factory or workshop, shall constitute prima facie evidence of his or her employment therein.

SEC. 13. It shall be the special duty of the State factory inspector to enforce the provisions of this act, and to prosecute all violations of the same before any magistrate or any court of competent jurisdiction in this State. It shall be the duty of the State factory inspector, assistant State factory inspector and deputy State factory inspectors under the supervision and direction of the State factory inspector, and they are hereby authorized and empowered to visit and inspect, at all reasonable times, and as often as possible, all places covered by this act.

SEC. 14. Whoever, having under his control a child under the age of 16 years, permits such child to be employed in violation of the provisions of this act, shall for each offense be fined not less than \$5 nor more than \$25, and shall stand committed until such fine and costs are paid. A failure to produce to the inspector of factories, his assistants or deputies, any age and school certificates, or lists required by this act, shall constitute a violation of this act, and the person so failing shall, upon conviction, be fined not less than \$5 nor more than \$50 for each offense. Every person authorized to sign the certificate prescribed by section 7 of this act, who certifies to any materially false statement therein shall be guilty of a violation of this act, and upon conviction, be fined not less than \$5 nor more than \$100 for each offense, and shall stand committed until such fine and costs are paid. Any person, firm or corporation, agent or manager, superintendent or foreman of any firm or corporation, whether for himself or for such firm or corporation, or by himself or through subagents or foreman, superintendent or manager, who shall violate or fail to comply with any of the provisions of this act, or shall refuse admittance to premises, or otherwise obstruct the factory inspector, assistant factory inspector or deputy factory



inspector in the performance of their duties, as prescribed by this act, shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined not less than \$5 nor more than \$100 for each offense, and shall stand committed until such fine and costs are paid.

## INDIANA.

### ANNOTATED STATUTES OF 1894—REVISION OF 1901.

#### *Certain occupations forbidden—Employment in mines.*

SECTION 2241. Any person having the care, custody or control of any minor child under the age of fifteen years, who shall in any manner sell, apprentice, give away, or otherwise dispose of such child, and any person who shall take, receive or employ such child for the vocation or occupation of rope or wire walking, or as an acrobat, gymnast, contortionist, or rider, and any person who, having the care, custody or control of any minor child shall sell, apprentice, give away or otherwise dispose of such child, or who shall take, receive or employ such child for any obscene, indecent or illegal exhibition or vocation, or any vocation injurious to the health or dangerous to the life or limb of such child engaged therein, or for the purpose of prostitution, and any person who shall retain, harbor or employ any minor child in or about any assignation house or brothel, or in any place where any obscene, indecent or illegal exhibition takes place, shall be guilty of a misdemeanor, and upon conviction thereof before any justice of the peace, mayor, police judge or criminal court shall be fined not less than ten dollars, nor more than one hundred dollars, to which may be added imprisonment not exceeding thirty days.

SEC. 2242. Any person having the care, custody or control, lawful or unlawful, of any minor child under the age of eighteen years, who shall apprentice, give away, let out, hire, or otherwise dispose of such minor to any person for the purpose of singing, playing on musical instruments, begging, or for any mendicant business whatever, in the streets, roads or other highways of the State, and whosoever shall take, receive, hire, employ, use or have in custody any such [minor] for the vocation, occupation, calling, service or purpose of singing, playing upon musical instruments or begging upon the streets, roads or other highways of the State, or for any mendicant business whatever, shall be guilty of a misdemeanor, and upon conviction thereof in the manner provided in the first section of this act, shall be fined not less than five dollars nor more than one hundred dollars, to which may be added imprisonment not exceeding thirty days.

SEC. 2243. Any person having the care, custody or control of any minor child under the age of fifteen years, who shall in any manner sell, apprentice, give away, or permit such child to sing, dance, act, or in any manner exhibit in any dance house whatever, or in any concert saloon, theater, or place of entertainment where wines or spirituous or malt liquors are sold or given away, or with which any place for the sale of wines or spirituous or malt liquors is directly or indirectly connected by any passage way or entrance, or any proprietor of any dance house whatever, or the proprietor of any such concert saloon, theater or place of entertainment so employing any such child, shall be guilty of a misdemeanor, and upon conviction thereof, \* \* \* shall be fined not less than ten dollars nor more than one hundred dollars for each offense, to which may be added imprisonment not exceeding thirty days.

SEC. 2244. Any person who shall take, receive, hire or employ any child under twelve years of age in any underground works, or mines, or like place whatsoever, shall be guilty of a misdemeanor, and upon conviction thereof in the manner provided in the first section of this act, shall be fined not less than five dollars nor more than fifty dollars.

#### *Hours of labor—Age limit—Illiterates—Employment on elevators.*

SECTION 7087a. No person under sixteen years of age, and no female under eighteen years of age, employed in any manufacturing or mercantile establishment, laundry, renovating works, bakery or printing office, shall be required, permitted or suffered to work therein more than sixty hours in any one week, nor more than ten hours in any one day, unless for the purpose of making a shorter day on the last day of the week; nor more hours in any one week than will make an average of ten hours per day for the whole number of days which such person or such female shall so work during such week; and every person,



firm, corporation or company employing any person under sixteen years of age, or any female under eighteen years of age in any establishment as aforesaid, shall post and keep posted in a conspicuous place in every room where such help is employed a printed notice stating the number of hours of labor per day required of such person for each day of the week, and the number of hours of labor exacted or permitted to be performed by such persons shall not exceed the number of hours of labor so posted as being required. The time of beginning and ending the day's labor shall be the time stated in such notice: *Provided*, That such female under eighteen and persons under sixteen years of age may begin after the time set for beginning and stop before the time set in such notice for the stopping of the day's labor, but they shall not be permitted or required to perform any labor before the time stated on the notices as the time for beginning the day's labor, nor after the time stated upon the notices as the hour of ending the day's labor.

SEC. 7087b. No child under fourteen years of age shall be employed in any manufacturing or mercantile establishment, mine, quarry, laundry, renovating works, bakery or printing office within this State. It shall be the duty of every person employing young persons under the age of sixteen years to keep a register, in which shall be recorded the name, birthplace, age and place of residence of every person employed by him under the age of sixteen years; and it shall be unlawful for any proprietor, agent, foreman or other person connected with a manufacturing or mercantile establishment, mine, quarry, laundry, renovating works, bakery or printing office to hire or employ any young person to work therein without there is first provided and placed on file in the office an affidavit made by the parent or guardian, stating the age, date and place of birth of said young person; if such young person have no parent or guardian, then such affidavit shall be made by the young person, which affidavit shall be kept on file by the employer, and said register and affidavit shall be produced for inspection on demand made by the inspector, appointed under this act. There shall be posted conspicuously in every room where young persons are employed, a list of their names, with their ages, respectively. No young person under the age of sixteen years, who is not blind, shall be employed in any establishment aforesaid, who can not read and write simple sentences in the English language, except during the vacation of the public schools in the city or town where such minor lives. The chief inspector of the department of inspection shall have the power to demand a certificate of physical fitness from some regular physician in the case of young persons who may seem physically unable to perform the labor at which they may be employed, and shall have the power to prohibit the employment of any minor that can not obtain such certificate.

Employment of a boy under fourteen years of age is negligence per se; but it must be the proximate cause of the injuries of a plaintiff to make an employer liable therefor. 73 N. E. Rep., 117.

The fact that a parent or guardian knows of the employment of a child within the age limits requiring an affidavit of such parent or guardian, and that they do not inform the employer of the age, does not excuse the latter from the duty of obtaining the certificate. 71 N. E. Rep., 922.

SEC. 7087d. No person, company, corporation or association shall employ or permit any young person to have the care, custody, management of or to operate any elevator.

## ACTS OF 1905.

### CHAPTER 50.—*Employment in mines.*

SECTION 24. No male person under the age of fourteen years or female of any age shall be permitted to enter any mine in this State for the purpose of employment therein, and the parents or guardians of boys shall be required to furnish an affidavit as to the age of said boy or boys when there is any doubt in regard to their age, and in all cases of minors applying for work the operator of any mine shall see that the provisions of this section are not violated.

### CHAPTER 169.—*Hours of labor—Penalty.*

SECTION 629. Any person, firm, company, corporation or association engaged in manufacturing in this State, and permitted by law to employ child labor; or any foreman, clerk, officer, or agent of any such person, firm, corporation or association, who shall employ or keep at work any child under fourteen years of age more than eight hours per day, shall, on conviction, be fined not less than ten dollars nor more than one hundred dollars.



**IOWA.****CODE OF 1897, WITH REVISIONS AND ADDITIONS CONTAINED IN  
SUPPLEMENT OF 1902.***Employment in mines.*

SECTION 2489. The owner or person in charge of any mine \* \* \* shall not allow a boy under twelve years of age to work in the mines, and, when in doubt regarding the age of one seeking employment, shall, before engaging him, obtain the affidavit of the applicant's parent or guardian in regard thereto. \* \* \*

*Earnings of minors.*

SECTION 3191. Where a contract for the personal services of a minor has been made with him alone, and the services are afterwards performed, payment therefor made to him, in accordance with the terms of the contract, is a full satisfaction therefor, and the parent or guardian can not recover a second time.

*Cleaning machinery in motion—Operating dangerous machinery.*

SECTION 4999b. \* \* \* No person under sixteen years of age, and no female under eighteen years of age shall be permitted or directed to clean machinery while in motion. Children under sixteen years of age shall not be permitted to operate or assist in operating dangerous machinery of any kind.

**KANSAS.****GENERAL STATUTES OF 1901.***Certain employments forbidden.*

SECTION 2034. \* \* \* any person having in his custody or control a child under the age of fourteen years, who shall in any way dispose of it with a view to its being employed as an acrobat, or a gymnast, or a contortionist, or a circus rider, or a ropewalker, or in any exhibition of like dangerous character, or as a beggar, or mendicant, or pauper, or street singer, or street musician; or any person who shall take, receive, hire, employ, use, exhibit, or have in custody any child of the age last named for any of the purposes last enumerated, shall be deemed guilty of a misdemeanor, and when convicted thereof shall be subject to punishment by a fine of not more than two hundred and fifty dollars, or by imprisonment for a term not exceeding one year, or both.

*Employment in mines.*

SECTION 4140. No person under twelve years of age shall be allowed to work in any coal mine, nor any minor between the ages of twelve and sixteen years unless he can read and write and furnish a certificate from a school teacher, which shall be kept on file, showing that he has attended school at least three months during the year; and in all cases of minors applying for work, the agent of such coal mine shall see that the provisions of this section are not violated; and upon conviction of a willful violation of this section of this act, the agent of such coal mine shall be fined in any sum not to exceed fifty dollars for each and every offense.

**ACTS OF 1905.****CHAPTER 278.—Employment of children—Age limit in factories, mines, etc.**

SECTION 1. No child under fourteen years of age shall be employed at any time in any factory or packing houses or in or about any mine. No person under sixteen years of age shall be employed at any occupation nor at any place dangerous or injurious to life, limb, health, or morals.

SEC. 2. All persons, firms or corporations employing children shall be required first to obtain a certificate of the age of such children, where possible, from the school board, principal of school or teacher of the school in district or city



wherein such children reside. Said certificate shall be issued without charge; shall be substantially in the following form:

STATE OF KANSAS, COUNTY OF \_\_\_\_\_, \_\_\_\_\_ CITY OR DISTRICT.

This certifies that \_\_\_\_\_, according to the records of this school and from all the knowledge that I can obtain, was born at \_\_\_\_\_, in \_\_\_\_\_ County, and \_\_\_\_\_ city, of the State of \_\_\_\_\_, and is now under \_\_\_\_\_ years of age.  
(Signed.) \_\_\_\_\_.

To which shall be added the name of the school district or city and the official position of the member of the board, principal or teacher signing the same. When it is impossible to secure the certificate herein above provided for as to the age of the child, the firm, person or corporation [corporation] employing such child shall secure a statement of the age of such child from the parent or legal guardian of such child, which statement shall be verified under oath before some officer authorized to administer oaths. Such certificate shall be sufficient protection to the employer of any child as to the age of such child, except when such employer has actual knowledge of the falsity of such certificate; and all such certificates shall be kept constantly on file in a convenient place, and shall at all times be open to the inspection of the proper authorities, as provided in this act.

SEC. 3. It shall be the duty of the State factory inspector, State inspector of mines and their deputies to inspect the certificates herein above provided for, to examine children employed in factories, mines and packing houses as to their age, and to file complaints in any court of competent jurisdiction to enforce the provisions of this act, and it shall be the duty of the county attorney of the proper county to appear and prosecute all complaints so filed.

SEC. 4. Any person, firm or corporation employing any person or child in violation of any provisions of this act, or permitting or conniving at such violation, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail not less than thirty days nor more than ninety days.

## KENTUCKY.

### CONSTITUTION.

#### *Employment to be regulated.*

SECTION 243. The general assembly shall, by law, fix the minimum ages at which children may be employed in places dangerous to life or health, or injurious to morals; and shall provide adequate penalties for violations of such law.

### STATUTES OF 1903.

#### *Certain employments forbidden—Age limit in factories, etc.*

SECTION 326. A person who, for gain or reward, employs or causes to be employed, or who exhibits, uses, or who has in his custody for the purpose of exhibiting or employing any child actually or apparently under the age of sixteen years, or any person who, having the care, custody, or control of such child, as parent, relative, guardian, employer, or otherwise, sells, lets out, gives away, or in any way procures or consents for gain or reward to the employment or exhibition of such child, either, first, in begging or receiving alms, or in any mendicant occupation; second, or (being a female) in peddling or in any wandering occupation; third, or male or female in any indecent or immoral occupation or practice, or in the exhibition of any such child when insane or idiotic; or, fourth, in any practice or exhibition of unusual danger to the life, limb, health, or morals of the child, is guilty of a misdemeanor, and shall, for the first offense, be fined not more than twenty dollars, or confined in the county jail or workhouse, in counties having a workhouse, not more than ninety days, or both so fined and confined within the discretion of the court; and, upon conviction for a second, or any subsequent offense, shall be fined in any sum not exceeding one hundred dollars, or imprisoned in the penitentiary for a term not exceeding one year, or both so fined and confined within the discretion of the jury.



SEC. 331a. 1. It shall be unlawful for a proprietor, foreman, owner or other person to employ any child less than fourteen years of age in any workshop, factory, or mine, in this State; unless said proprietor, foreman or owner shall know the age of the child, it shall be his or their duty to require the parent or guardian to furnish a sworn statement of its age, and any swearing falsely to such by the parent or guardian shall be perjury and punishable as such.

*Provided*, That if the parent or guardian and the county judge of any county may consent in writing for such employment, then in that event such employment may be made, subject to the approval of the county attorney of said county, in the event of any complaint, and if he thinks, after investigation of such complaint, that it is against the best interests or moral welfare of such infant child he may so notify said employer, and then this act applies as if no consent was given.

2. Any proprietor, foreman, or owner employing a child less than fourteen years of age in conflict with the provisions of this act, except where such proprietor, foreman or owner has been furnished with a sworn statement of guardian or parent that the child is more than fourteen years of age, shall be guilty of a misdemeanor, and upon conviction shall be fined not less than twenty-five dollars and not more than two hundred and fifty dollars.

## LOUISIANA.

### REVISED LAWS, 1897.

Act No. 43, Acts of 1886.—*Age limit—School attendance—Hours of labor—Time for dinner.*

(Page 515.)

SECTION 1. No boy under the age of twelve years, and no girl under the age of fourteen years, shall be employed in any factory, warehouse or workshop where the manufacture of any goods whatever is carried on, or where any goods are prepared for manufacturing.

SEC. 2. No child under the age of fourteen years shall be employed by any person to labor in any factory, warehouse, workshop, clothing, dressmaking or millinery establishment, or where any goods are manufactured or prepared for manufacturing, or attend itinerant musicians through the streets of any town or city within this State, unless such child shall have attended some public or private day school, where instruction was given by a teacher qualified to instruct in such branches as are usually taught in primary schools, at least four months of the twelve months next preceding the month in which such child shall be so employed: *Provided*, That a certificate of such attendance from the director of the school district or principal of public or private school in which such child shall have so attended school, shall be evidence of a compliance with the provisions of this section, if acted upon by the employer in good faith. If any such director or principal shall knowingly make a false certificate, he shall be deemed guilty of a violation of this act, and shall be liable to the punishment hereinafter provided.

SEC. 3. Certificates given under the preceding section shall be deposited by the employer at the time of employing such child, and shall be kept by him on file in his office, and shall at all times be subject to inspection by the persons authorized to make inspections under this act.

SEC. 4 (as amended by act No. 49, Acts of 1902). No child, or young person under the age of eighteen years, \* \* \* shall be employed in any factory, warehouse, workshop, telephone or telegraph office, clothing, dressmaking or millinery establishment, or in any place where the manufacture of any kind of goods is carried on, or where any goods are prepared for manufacture, for a longer period than an average of ten hours in any day, or sixty hours in any week, and at least one hour shall be allowed in the labor period of each day for dinner.

SEC. 6. Any person who shall violate any of the provisions of this act shall be deemed to be guilty of an offense for each violation thereof, and, upon conviction for the same, shall be punished by a fine of not less than ten nor more than one hundred dollars, or by imprisonment in the parish jail (parish prison in New Orleans) not more than thirty days, or both, in the discretion of the court.

SEC. 7. In all cities it shall be the duty of the superintendent or the chief officer of police, by suitable inspections, to see that the regulations of this act



are observed, and also to prosecute all persons who shall violate the same. Such superintendent or chief officer of police shall detail such portion of the force under him as he shall deem necessary for the inspection, from time to time, of all the aforesaid places where such children or young persons may be employed. In towns, the mayor thereof shall perform the duties above imposed on the superintendent or chief officer of police in cities.

SEC. 9. The word "person," wherever used in this act, shall be deemed to mean corporations, as well as individuals.

SEC. 10. \* \* \* Nothing contained in this act shall be construed to apply to domestic or agricultural laborers or industries.

ACT No. 60, ACTS OF 1892.—*Operating or cleaning machinery.*

(Page 516.)

SECTION 1. No child under the age of twelve years shall be permitted to operate or clean any part of the machinery in a factory while such part is in motion by the aid of steam, water or other mechanical power, or to clean any part of such machinery that is in dangerous proximity to such moving part.

SEC. 2. Whoever, either for himself, or superintendent, foreman, overseer or other agent of another, violates the provisions of the preceding section, shall be punished by a fine of not less than ten nor more than twenty-five dollars, or shall be subject to imprisonment for a term not exceeding thirty days, or both at the discretion of the court for each offense.

ACT No. 59, ACTS OF 1892.—*Certain employments forbidden.*

(Page 516.)

SECTION 1. Any person who employs or exhibits or gives away for the purpose of employing or exhibiting a child under fifteen years of age, for the purpose of walking on a wire or rope, or riding or performing as a gymnast, contortionist or acrobat in any circus or theatrical exhibition or in any public place whatsoever or who causes, procures or encourages any such child to engage therein, shall be punished by a fine, by any committing magistrate, of not less than ten dollars, nor more than twenty-five dollars or shall be subject to a term of imprisonment not exceeding thirty days or both at the discretion of the court.

SEC. 2. No license shall be granted for a theatrical exhibition or public show in which children under fifteen years of age are employed or [as] contortionists, acrobats, or in any feats of gymnast or equestrianism or where in the opinion of the mayor of a city or town authorized to grant licenses, such children are employed in such a manner as to corrupt their morals or impair their physical health.

ACTS OF 1904.

ACT No. 178.—*Employment, while parents live in idleness.*

SECTION 1. The several municipal corporations throughout the State shall adopt ordinances declaring vagrants, and punishing as such, \* \* \* (all persons able to work who do not work) but who live upon the wages or personal earnings of their wives or of their minor children; \* \* \*

MAINE.

REVISED STATUTES OF 1903.

CHAPTER 40.—*Hours of labor—Age limit—School attendance.*

SECTION 48. No female minor under eighteen years of age, no male minor under sixteen years of age, and no woman shall be employed in laboring in any manufacturing or mechanical establishment in the State, more than ten hours in any one day, except when it is necessary to make repairs to prevent the interruption of the ordinary running of the machinery, or when a different apportionment of the hours of labor is made for the sole purpose of making a shorter day's work for one day of the week; and in no case shall the hours of labor exceed sixty in a week; and no male person sixteen years and over shall be so employed as above, more than ten hours a day during minority, unless he voluntarily contracts to do so with the consent of his parents, or one of them,



if any, or guardian, and in such case he shall receive extra compensation for his services: *Provided, however,* That any female of eighteen years of age or over, may lawfully contract for such labor for any number of hours in excess of ten hours a day, not exceeding six hours in any one week or sixty hours in any one year, receiving additional compensation therefor; but during her minority, the consent of her parents, or one of them, or guardian, shall be first obtained.

SEC. 49. Every employer shall post in a conspicuous place in every room where such persons are employed, a notice printed in plain, large type, stating the number of hours' work required of them on each day of the week, the exact time for commencing work in the morning, stopping at noon for dinner, commencing after dinner, and stopping at night; the form of such printed notice shall be furnished by the inspector of factories, workshops, mines and quarries, and shall be approved by the attorney-general. And the employment of any such person for a longer time in any day than that so stated, shall be deemed a violation of the preceding section, unless it appears that such employment is to make up for time lost on some previous day of the same week, in consequence of the stopping of machinery upon which such person was employed or dependent for employment.

SEC. 50. Whoever, either for himself, or as superintendent, overseer or agent of another, employs or has in his employment any person in violation of the provisions of section forty-eight, and every parent or guardian who permits any minor to be so employed, shall be punished by a fine of not less than twenty-five, nor more than fifty dollars for each offense. A certificate of the age of a minor made by him and by his parent or guardian at the time of his employment, shall be conclusive evidence of his age in behalf of the hirer, upon any prosecution for a violation of the provisions of section forty-eight. Whoever falsely makes and utters such a certificate with an intention to evade the provisions of this chapter relating to the employment of minors, shall be subject to a fine of one hundred dollars.

SEC. 52. No child under twelve years of age, shall be employed in any manufacturing or mechanical establishment in the State. Whoever, either for himself, or as superintendent, overseer or agent of another, employs or has in his employment any child in violation of the provisions of this section, and every parent or guardian who permits any child to be so employed, shall be punished by a fine of not less than twenty-five, nor more than fifty dollars for each offense.

SEC. 53. No child under fifteen years of age shall be employed in any manufacturing or mechanical establishment in the State, except during vacations of the public schools in the city or town in which he resides, unless absence from such school is excused by the superintending school committee or superintendent of schools, or teacher acting by direction of either. \* \* \*

SEC. 54. Any parent or guardian who procures a child to be employed contrary to the preceding section, and any corporation, owner, superintendent or agent of the owner, of such establishment violating the provisions of said section, shall forfeit the sum of one hundred dollars, one-half to the use of the county, and one-half to the use of the city or town where the offense is committed. - Money so recovered to the use of the city or town, shall be added to its school money. School committees and superintendents of public schools, shall inquire into violations of said section and report the same to the county attorney, who shall prosecute therefor.

SEC. 55. Every owner, superintendent or overseer of any such manufacturing or mechanical establishment shall require and keep on file, a certificate of the age and place of birth of every child under sixteen years of age employed therein, so long as such child is so employed. Said certificate shall be signed by a member of the school committee of the place where such attendance has been had, or by some one authorized by such committee, \* \* \* The inspector of factories, workshops, mines and quarries, or either of his assistants, may demand the names of the children under sixteen years of age employed in such establishment, in the several cities and towns of the State, and may require that the certificates of age prescribed in this section, shall be produced for his inspection, and a failure to produce the same, shall be prima facie evidence that the employment of such child is illegal.

SEC. 56. Nothing in the eight preceding sections shall apply to any manufacturing establishment or business, the materials and products of which are perishable and require immediate labor thereon, to prevent decay thereof or damage thereto.



## ACTS OF 1905.

CHAPTER 123.—*Certain employments forbidden.*

SECTION 9. No person shall employ or cause to be employed, exhibit, use or have in custody, or train for use, employment or exhibition, any child under sixteen years of age, and no parent, guardian or other person, having care, custody and control of such child, shall procure or permit the training, use, employment or exhibition of any such child, in begging or soliciting or receiving alms in any manner or under any pretence, or in any illegal, indecent or immoral exhibition or practice, or in any exhibition of any such child when insane or idiotic, or when possessing any deformity and unnatural physical formation, or in any practice, exhibition or place dangerous or injurious to the life, limb, health or morals of such child. Whoever offends against the provisions of this section shall be punished by a fine not exceeding one hundred dollars or by imprisonment not exceeding sixty days.

## MARYLAND.

## CODE OF PUBLIC GENERAL LAWS, 1903.

ARTICLE 27.—*Hours of labor—Certain employments forbidden.*

SECTION 217. No child under sixteen years of age shall be employed in laboring more than ten hours a day in any manufacturing business or factory established in any part of the State, or in any mercantile business in the city of Baltimore.

SEC. 218. Any person who shall so employ a child or suffer or permit such employment shall be guilty of a misdemeanor.

SEC. 219. The word "suffer or permit," includes every act or omission whereby it becomes possible for the child to engage in such labor.

SEC. 309. Any person having in his custody or control a child under the age of fourteen years who shall in any way dispose of it with a view to its being employed as an acrobat, or a gymnast, or a contortionist, or a circus rider, or a ropewalker, or in any exhibition of like dangerous character, or as a beggar or mendicant, or street singer, or street musician, and any person who shall take, receive, hire, employ, use, exhibit or have in custody any child under the age last named for any of the purposes herein enumerated shall be deemed guilty of a misdemeanor and when convicted thereof shall be subject to punishment by fine of not more than one hundred dollars, or by imprisonment for a term not exceeding ninety days in jail, or both.

SEC. 311. No person shall employ a minor under sixteen years of age in handling intoxicating liquors, or in handling packages containing intoxicating liquors, in any brewery or bottling establishment where intoxicating liquors are prepared for sale or offered for sale.

SEC. 312. Whoever violates the provisions of section 311, shall be guilty of a misdemeanor, and on conviction thereof shall in the discretion of the court be fined a sum not less than ten dollars nor more than one hundred dollars, or be imprisoned in jail for not less than five nor more than thirty days, in default of payment of said fine.

SEC. 313. No person engaged in performing upon any musical instrument in, upon or near to any street, lane, alley or highway, or engaged in selling, vending or disposing of any goods, wares or merchandise in, upon or near to any street, lane, alley or highway, or engaged in any business, occupation or calling in, upon or near to any street, lane, alley or highway, and not having a fixed store, shop or place of business at which so engaged, shall have in his possession or company while so engaged, any boy or girl under the age of eight years; and any person violating the provisions of this section shall be punished by a fine not exceeding ten dollars for each and every such offense.

SEC. 398. Any person having in his care, custody or control any child under the age of sixteen years, whether as parent, guardian, relative, employer or otherwise, who shall sell, apprentice or give away, let out or otherwise dispose of any such child to any person under any name, title or pretense whatever, and any person, whether as parent, guardian, relative, employer or otherwise, who shall take, receive, hire, employ, use or have in custody any such child for the vocation, use, occupation, calling, service or purpose of singing,



playing on musical instruments, rope walking, dancing, peddling, begging or any mendicant or wandering business whatsoever shall be deemed guilty of a misdemeanor, and upon conviction thereof before any competent tribunal to which such person may be committed for trial shall be fined not less than fifty nor more than two hundred and fifty dollars, or be imprisoned in a county jail for not less than thirty days nor more than a year, or suffer both such fine and imprisonment in the discretion of the said tribunal; one-half of all fines so imposed to be paid to the informer.

ARTICLE 56.—*Employment in barrooms.*

SECTION 97.—It shall not be lawful for any person, or for any club or association, or for any corporation now formed or hereafter to be formed, or for any officer, agent or employee of any such club, association or corporation, to hire or employ any minor to sell or dispense anywhere in the State any beer or spirituous or fermented liquors of any kind at retail, where such beer or liquors are to be drunk upon the premises. Any person violating any provision of this section shall upon conviction be fined a sum not exceeding one hundred dollars.

ARTICLE 77.—*Certificates of age—Illiterates.*

SECTION 160. No proprietor or owner of any mill or factory in Allegany County or the city of Baltimore, other than establishments for manufacturing canned goods, or manager, agent, foreman or other person in charge thereof, shall employ or retain in employment in any such mill or factory any person or persons under sixteen years of age, unless he procures at the time of such employment or retention in employment, and keeps on file and accessible to the attendance officers of said city or county where such minor is employed, a certificate of the principal or head teacher of the school which such child last attended, stating that such child is more than twelve years of age, and a like certificate of the parent or guardian, or other person having control of such child; but the first named certificate need not be procured if such child has not attended school in this State. He shall require such certificates, shall keep them in his place of business during the time the child is in his employment, and shall show the same during his business hours to any attendance officer who may demand to see them, or either of them; and for each failure to comply with any of the provisions of this section he shall be guilty of a misdemeanor, and shall be fined not exceeding one hundred dollars. Whoever continues to employ any such child under sixteen years of age, in violation of this section, after being notified of such violation by an attendance officer, shall for every day thereafter that such unlawful employment continues be fined not less than five nor more than twenty dollars, in addition to other penalties prescribed by this section for such offenses. A failure to produce on demand to an attendance officer any certificate required by this section shall be prima facie evidence that the child, who is or should have been mentioned in the said certificate, is thus unlawfully employed.

SEC. 161. It shall be the duty of every parent, guardian or other person having control of a child under sixteen years of age, and of every principal or head teacher of said school where such child last attended, to furnish every employer of such child the certificates required by the preceding section. Such certificates, if in substantial conformity with the requirements of that section, shall be prima facie evidence of the facts required to be certified to as therein provided.

SEC. 162. Any parent or guardian or other person having control of a child, or principal or head teacher who shall make any willfully false statement respecting any of the facts required to be certified to as provided in sections 160 and 161 of this subtitle, shall be deemed guilty of a misdemeanor, and shall be fined not more than fifty dollars, or to [sic] be imprisoned not more than thirty days, or suffer both fine and imprisonment in the discretion of the court.

SEC. 163. No person shall employ any minor over twelve and less than sixteen years of age, and no parent, guardian or other person having control of a child, shall permit to be employed or retained in employment any such minor under his control, if the said minor can not read at sight and write legibly simple sentences in the English language while a public evening school is maintained in the city or election district or precinct in which such minor resides, unless such minor is a regular attendant at an evening or other school: *Provided*, That upon presentation by such minor of a certificate signed by a regular practicing physician, and satisfactory to such officer or officers as the school commissioners for such county or city may designate, showing that the physical condition of such



minor would render such attendance, in addition to daily labor prejudicial to health, said officer or officers so designated may issue a permit authorizing the employment of such minor for such period and upon such conditions as said officer or officers so designated as aforesaid may determine. Any person who employs or retains in employment a minor in violation of the provisions of this section shall be deemed guilty of a misdemeanor and be fined for each offense not more than one hundred dollars, which fines shall be paid to the school commissioners for use in supporting evening schools in such city or county. Any parent, guardian or other person having control of a child, who permits to be employed any minor under his control in violation of the provisions of this section, shall be deemed guilty of a misdemeanor and be fined not more than twenty dollars, which fines shall be also paid to the school commissioners for use in supporting evening schools in such city and county.

SEC. 164. In said city or county where attendance officers may have been appointed, it shall be the duty of the school commissioners to designate an attendance officer, who shall once or more frequently in every year examine into the situation of the children employed in such mills and factories in said city or county, and to ascertain whether all the provisions of this subtitle are duly observed and report all violation thereof to the grand jury of the said city or county.

SEC. 165. Attendance officers may visit all establishments where minors are employed in said city or county and ascertain whether any minors are employed therein contrary to the provisions of this subtitle. Attendance officers may require that the certificate, provided in this subtitle of minors employed in such establishments shall be produced for their inspection.

SEC. 166. Any person violating any provision of sections 152-165, where no special provision as to the penalty for such violation is made shall be deemed guilty of a misdemeanor, and be fined not exceeding fifty dollars for each offense. Sections 152-166 are restricted to Baltimore city and Allegany County.

#### ARTICLE 100.—*Age limit.*

SECTION 4. No proprietor or owner of any mill or factory in this State (other than establishments for manufacturing canned goods), or manager, agent or foreman, or other person in charge thereof shall, \* \* \* employ or retain in employment in any such mill or factory any person or persons under fourteen years of age, unless said child is the only support of a widowed mother, invalid father, or is solely dependent upon such employment for self-support; and if any such proprietor or owner of any such mill or factory, or manager, agent, foreman or other person in charge thereof shall willfully violate the provisions of this section, he shall be guilty of a misdemeanor, and on conviction thereof shall be fined not less than one hundred dollars for each and every offense so committed and pay the cost of prosecution, one-half to go to the informer and the other half to the school fund of the county or city in which the offense shall have been committed: *Provided*, That nothing in this section shall apply to Frederick, Washington, Queen Anne's, Carroll, Wicomico, Caroline, Kent, Somerset, Cecil, Calvert, St. Mary's, Prince George's, Howard, Baltimore, Worcester, Garrett, Talbott, Montgomery and Harford counties.

#### CODE OF PUBLIC LOCAL LAWS, 1888.

##### ARTICLE 1.—*Employment in mines.*

SECTION 209n (added by chapter 124, Acts of 1902) Subsec. H. No person under the age of twelve years, or female of any age, shall be permitted to enter any mine to work therein; nor shall any boy under the age of fourteen years, unless he can read and write, be allowed to work in any mine. And the mine boss shall see that this requirement is fully met.

#### MASSACHUSETTS.

##### REVISED LAWS OF 1902.

##### CHAPTER 44.—*Employment of children unlawfully absent from school.*

SECTION 1 (as amended by chapter 320, Acts of 1905). Every child between seven and fourteen years of age, and every child under sixteen years of age who can not read at sight and write legibly simple sentences in the English language, shall attend some public day school in the city or town in which he



resides during the entire time the public day schools are in session, subject to such exceptions as to children, places of attendance and schools as are provided for in section three of chapter forty-two and sections three, five and six of this chapter [relating to towns having no high school, to attendance and place of residence, and to exclusion on account of contagious diseases]. The superintendent of schools or, if there is no superintendent of schools, the school committee, or teachers acting under authority of said superintendent or committee, may excuse cases of necessary absence. The attendance of a child upon a public day school shall not be required if he has attended for a like period of time a private day school approved by the school committee of such city or town in accordance with the provisions of the following section, or if he has been otherwise instructed for a like period of time in the branches of learning required by law to be taught in the public schools, or if he has already acquired such branches of learning, or if his physical or mental condition is such as to render such attendance inexpedient or impracticable. \* \* \* Whoever induces or attempts to induce a child to absent himself unlawfully from school, or employs or harbors a child who, while school is in session, is absent unlawfully from school shall be punished by a fine of not more than fifty dollars.

CHAPTER 100.—*Employment in barrooms, etc.*

SECTION 60. Whoever, being the holder of a license for the sale of intoxicating liquors to be drunk on the premises, employs any person under the age of eighteen years to serve such liquors to be drunk on the premises shall be punished by a fine of not more than one hundred dollars.

SEC. 61. Whoever employs a minor under the age of eighteen years in handling intoxicating liquors or packages containing such liquors in a brewery or bottling establishment in which such liquors are prepared for sale or offered for sale shall, for each offense, be punished by a fine of not less than fifty dollars or by imprisonment for not less than three months, or by both such fine and imprisonment. The provisions of this section shall not prohibit the employment of minors in drug stores.

CHAPTER 106.—*Hours of labor—Night work—Age limit—Illiterates—Time for meals—Certain employments forbidden—Deductions from wages.*

SECTION 23 (as amended by chapter 397, Acts of 1904). No child under eighteen years of age \* \* \* shall be employed in laboring in a mercantile establishment more than fifty-eight hours in a week. Every employer shall post in a conspicuous place in every room in which such persons are employed a printed notice stating the number of hours' work which are required of them on each day of the week, the hours of commencing and stopping such work, and the hour when the time or times allowed for dinner or other meals begin and end. The printed form of such notice shall be furnished by the chief of the district police and shall be approved by the attorney-general. The employment of any such person for a longer time in any day than that so stated shall be deemed a violation of the provisions of this section. An employer, superintendent, overseer or other agent of a mercantile establishment who violates any of the provisions of this section shall be punished by a fine of not less than fifty nor more than one hundred dollars.

SEC. 24 (as amended by chapter 435, Acts of 1902). No child under eighteen years of age \* \* \* shall be employed in laboring in a manufacturing or mechanical establishment more than ten hours in any one day, except as hereinafter provided in this section, unless a different apportionment of the hours of labor is made for the sole purpose of making a shorter day's work for one day of the week; and in no case shall the hours of labor exceed fifty-eight in a week. Every employer shall post in a conspicuous place in every room in which such persons are employed a printed notice stating the number of hours' work required of them on each day of the week, the hours of commencing and stopping work, and the hours when the time allowed for meals begins and ends or, in the case of establishments exempted from the provisions of sections thirty-six and thirty-seven, the time, if any, allowed for meals. The printed forms of such notices shall be provided by the chief of the district police, after approval by the attorney-general. The employment of such person at any time other than as stated in said printed notice shall be deemed a violation of the provisions of this section unless it appears that such employment was to make up



time lost on a previous day of the same week in consequence of the stopping of machinery upon which he was employed or dependent for employment; but no stopping of machinery for less than thirty consecutive minutes shall justify such overtime employment, nor shall such overtime employment be authorized until a written report of the day and hour of its occurrence and its duration is sent to the chief of the district police or to an inspector of factories and public buildings.

SEC. 25. A parent or guardian who permits a minor under his control to be employed in violation of the provisions of the two preceding sections and any person, who, either for himself or as superintendent, overseer or agent for another, employs any person in violation of the provisions of said sections or fails to post the notice required by the preceding section or makes a false report of the stopping of machinery under the provisions of said section shall be punished by a fine of not less than fifty nor more than one hundred dollars. A certificate of the age of a minor, made and sworn to by him and by his parent or guardian at the time of his employment in a mercantile establishment, shall be prima facie evidence of his age in any prosecution under the provisions of this section.

SEC. 27. No person, and no agent or officer of a person or corporation, shall employ a \* \* \* minor in any capacity for the purpose of manufacturing between ten o'clock at night and six o'clock in the morning. Whoever violates the provisions of this section shall be punished by a fine of not less than twenty nor more than fifty dollars for each offense.

SEC. 28 (as amended by chapter 267, Acts of 1905). 1. No child under the age of fourteen years and no child who is over fourteen and under sixteen years of age who does not have a certificate as required by the following four sections certifying to the child's ability to read at sight and to write legibly simple sentences in the English language shall be employed in any factory, workshop or mercantile establishment. No child under the age of fourteen years shall be employed at work performed for wages or other compensation, to whomsoever payable, during the hours when the public schools of the city or town in which he resides are in session, or be employed at work before six o'clock in the morning or after seven o'clock in the evening.

2. No certificate as provided for by sections twenty-nine to thirty-two inclusive of chapter one hundred and six of the Revised Laws shall be approved by any person for a minor under the age of sixteen years who intends to be employed in a factory, workshop or mercantile establishment, unless such person is satisfied that such minor is able to read at sight and to write legibly simple sentences in the English language.

SEC. 29. No child under sixteen years of age shall be employed in a factory, workshop or mercantile establishment unless his employer procures and keeps on file, accessible to the truant officers of the city or town, and to the district police and inspectors of factories and public buildings, an age and schooling certificate and keeps two complete lists of all such minors employed therein, one on file, and one conspicuously posted near the principal entrance of the building in which such children are employed, and also keeps on file and sends to the superintendent of schools or, if there is no superintendent, to the school committee a complete list of the names of all minors employed therein who can not read at sight and write legibly simple sentences in the English language.

SEC. 30. An age and schooling certificate shall be approved only by the superintendent of schools or by a person authorized by him in writing, or, if there is no superintendent of schools, by a person authorized by the school committee; but no member of a school committee or other person authorized as aforesaid shall approve such certificate for any minor then in or about to enter his own employment or the employment of a firm or corporation of which he is a member, officer or employee. The person who approves the certificate may administer the oath provided for therein, but no fee shall be charged therefor.

SEC. 31 (as amended by chapter 213, Acts of 1905). An age or schooling certificate shall not be approved unless satisfactory evidence is furnished by a certificate of birth or baptism of such minor, or by the register of birth of such minor with a city or town clerk, that such minor is of the age stated in the certificate, except that other evidence, under oath, may be accepted in case the superintendent or person authorized by the school committee, as provided in the preceding section, decides that neither the certificate of birth or baptism, nor the register of birth is available for the purpose.

SEC. 32. The age and schooling certificate of a minor under sixteen years of age shall not be approved and signed until he presents to the person who is authorized to approve and sign it an employment ticket duly filled out and signed.



A duplicate of each age and schooling certificate shall be filled out and shall be kept on file by the school committee. Any explanatory matter may, in the discretion of the school committee or superintendent of schools, be printed with such certificate. The employment ticket and the age and schooling certificate shall be separately printed, and shall be filled out, signed and held or surrendered, as indicated in the following forms:

## EMPLOYMENT TICKET, REVISED LAWS, C. 106, SEC. 32.

When [name of minor], height [feet and inches], complexion [fair or dark], hair [color], presents an age and schooling certificate duly signed, I intend to employ [him or her].

(Signature of intending employer or agent.)

(Town or city and date.)

## AGE AND SCHOOLING CERTIFICATE, REVISED LAWS, C. 106, SEC. 32.

This certifies that I am the [father, mother, guardian or custodian] of [name of minor], and that [he or she] was born at [name of city or town], in the county of [name of county, if known], and State [or country] of , on the [day and year of birth], and is now [number of years and months] old.

(Signature of father, mother, guardian or custodian.)

(City or town and date.)

Then personally appeared before me the above-named [name of person signing], and made oath that the foregoing certificate by [him or her] signed is true to the best of [his or her] knowledge and belief. I hereby approve the foregoing certificate of [name of minor], height [feet and inches], complexion [fair or dark], hair [color], having no sufficient reason to doubt that [he or she] is of age therein certified. I hereby certify that [he or she] [can or can not] read at sight and [can or can not] write legibly simple sentences in the English language.

This certificate belongs to [name of minor in whose behalf it is drawn], and is to be surrendered to [him or her] whenever [he or she] leaves the service of the corporation or employer holding the same; but if not claimed by said minor within thirty days from such time, it shall be returned to the superintendent of schools, or, if there is no superintendent of schools, to the school committee.

(Signature of person authorized to approve and sign, with official character or authority.)

(City or town and date.)

In the case of a minor who can not read at sight and write legibly simple sentences in the English language, the certificate shall continue as follows, after the word "language":—

I hereby certify that [he or she] is regularly attending the [name] public evening school. This certificate shall continue in force only so long as the regular attendance of said minor at the evening school is endorsed weekly by a teacher thereof.

Whoever, being authorized to sign the foregoing certificate, knowingly certifies to any materially false statement therein shall be punished by a fine of not more than fifty dollars.

SEC. 33. Whoever employs a minor under sixteen years of age, and whoever having under his control a minor under such age permits such minor to be employed, in violation of the provisions of sections twenty-eight and twenty-nine, shall for such offense be punished by a fine of not more than fifty dollars; and whoever continues to employ a minor in violation of the provisions of either of said sections, after being notified by a truant officer or an inspector of factories and public buildings thereof, shall for every day thereafter that such employment continues be punished by a fine of not less than five nor more than twenty dollars. A failure to produce to a truant officer or inspector of factories and public buildings an age and schooling certificate or list required by law shall be prima facie evidence of the illegal employment of any person whose age and schooling certificate is not produced or whose name is not so listed. A corporation or employer who retains an age and schooling certificate in violation of the provisions of said certificate shall be punished by a fine of ten dollars.



SEC. 34. Truant officers may visit the factories, workshops and mercantile establishments in their several cities and towns and ascertain whether any minors are employed therein contrary to the provisions of this chapter, and shall report any cases of such illegal employment to the school committee and to the chief of the district police or to the inspector of factories and public buildings. Inspectors of factories and public buildings and truant officers may require that the age and schooling certificates and lists of minors who are employed in such factories, workshops or mercantile establishments shall be produced for their inspection. Complaints for offenses under the provisions of this chapter shall be made by inspectors of factories and public buildings.

SEC. 35 (as amended by chapter 183, Acts of 1902). While a public evening school is maintained in the city or town in which any minor who is over fourteen years of age and who does not have a certificate signed by the superintendent of schools, or by the school committee, or by some person acting under authority thereof, certifying to the minor's ability to read at sight and write legibly simple sentences in the English language resides, no person shall employ him and no parent, guardian or custodian shall permit him to be employed unless he is a regular attendant at such evening school or at a day school; but, upon presentation by such minor of a certificate signed by a registered practicing physician and satisfactory to the superintendent of schools, or, if there is no such superintendent, to the school committee, showing that his physical condition would render such attendance in addition to daily labor prejudicial to his health, said superintendent or school committee shall issue a permit authorizing the employment of such minor for such period as said superintendent or school committee may determine. Said superintendent or school committee, or teachers acting under authority thereof, may excuse any absence from such evening school which arises from justifiable cause. Any minor not holding the certificate described above shall furnish to his employer a record of his school attendance each week while the evening school is in session, and when this record shows unexcused absences from the sessions his attendance shall be deemed irregular according to this act. Whoever employs a minor in violation of the provisions of this section shall forfeit not more than one hundred dollars for each offense to the use of the evening schools of such city or town. A parent, guardian or custodian who permits a minor under his control to be employed in violation of the provisions of this section shall forfeit not more than twenty dollars to the use of the evening schools of such city or town.

SEC. 36. \* \* \* young persons, five or more in number, who are employed in the same factory shall be allowed their meal times at the same hour, except that any such persons who begin work in such factory at a later hour in the morning than other such persons employed therein may be allowed their meal times at a different time; but no such persons shall be employed during the regular meal hour in tending the machines or doing the work of any other \* \* \* young persons in addition to their own.

SEC. 37. No \* \* \* young person shall be employed for more than six hours at one time in a factory or workshop in which five or more such persons are employed without an interval of at least half an hour for a meal; but such person may be so employed for not more than six and one-half hours at one time if such employment ends not later than one o'clock in the afternoon and if he or she is then dismissed from the factory or workshop for the remainder of the day; or for not more than seven and one-half hours at one time if he or she is allowed sufficient opportunity for eating a lunch during the continuance of such employment and if such employment ends not later than two o'clock in the afternoon, and he or she is then dismissed from the factory or workshop for the remainder of the day.

SEC. 38. The provisions of the two preceding sections shall not apply to iron-works, glassworks, paper mills, letter press establishments, print works, bleaching works or dyeing works; and the chief of the district police, if it is proved to his satisfaction that in any other class of factories or workshops it is necessary, by reason of the continuous nature of the processes or of special circumstances affecting such class, to exempt it from the provisions of the two preceding sections and that such exemption can be made without injury to the health of the women or young persons affected thereby, may, with the approval of the governor, issue a certificate granting such exemption, public notice whereof shall, without expense to the Commonwealth, be given in the manner directed by said chief.

SEC. 39. If a minor under the age of eighteen years \* \* \* shall, without the orders, consent or knowledge of the employer or of a superintendent, over-



seer or other agent of the employer, labor in a manufacturing or mechanical establishment, factory or workshop during a part of any time allowed for meals in such establishment, factory or workshop, according to the notice required by section twenty-four, and if a copy of such notice was posted in a conspicuous place in the room where such labor was performed with a rule of the establishment, factory or workshop forbidding such minor \* \* \* to labor during such time, then neither the employer nor a superintendent, overseer or other agent of the employer shall be held responsible for such labor.

SEC. 40. Whoever either for himself or as a superintendent, overseer or agent violates the provisions of the four preceding sections shall be punished by a fine of not less than fifty nor more than one hundred dollars.

SEC. 42. Whoever, either for himself or as superintendent, overseer or agent permits a child under fourteen years of age to clean any part of the machinery in a factory, if it is in motion by the aid of steam, water or other mechanical power, or if it is in dangerous proximity to such moving part, shall be punished by a fine of not less than fifty nor more than one hundred dollars for each offense.

SEC. 43. Whoever employs or permits a child under fifteen years of age to have the care, custody, management or operation of an elevator, or employs or permits a child under eighteen years of age to have the care, custody, management or operation of an elevator running at a speed of over two hundred feet a minute shall be punished by a fine of not less than twenty-five nor more than one hundred dollars for each offense.

SEC. 44. The State board of health shall, upon the application of any citizen of the Commonwealth, determine, after such investigation as it considers necessary, whether or not the manufacture of a particular acid is dangerous or injurious to the health of minors under eighteen years of age; and its decision shall be conclusive evidence thereof. Whoever employs a child under eighteen years of age in the manufacture of an acid after the State board of health has determined that such manufacture is dangerous or injurious to his health shall be punished by a fine of one hundred dollars for each offense.

SEC. 45. No person shall employ, exhibit or sell, apprentice or give away, a child under fifteen years of age for the purpose of employing or exhibiting him in dancing on the stage, playing on musical instruments, singing, walking on a wire or rope, or riding or performing as a gymnast, contortionist or acrobat in a circus, theatrical exhibition or in any public place, or cause, procure or encourage such child to engage therein; but the provisions of this section shall not prevent the education of children in vocal and instrumental music or dancing or their employment as musicians in a church, chapel, school or school exhibition, or prevent their taking part in any festival, concert or musical exhibition upon the special written permission of the mayor and aldermen of a city or of the selectmen of a town. Whoever violates the provisions of this section shall be punished by a fine of not more than two hundred dollars or by imprisonment for not more than six months.

SEC. 46. A license shall not be granted for a theatrical exhibition or public show in which children under fifteen years of age are employed as acrobats or contortionists or in any feats of gymnastics or equestrianism, or in which such children who belong to the public schools are employed or allowed to take part as performers on the stage in any capacity, or if, in the opinion of the board authorized to grant licenses, such children are employed in such a manner as to corrupt their morals or impair their health; but the provisions of this section shall not prevent the granting of special permission authorized by the preceding section.

SEC. 51. A factory in which five or more persons and a workshop in which five or more women or young persons [from fourteen to eighteen years of age] are employed shall, while work is carried on therein, be so ventilated that the air shall not become so impure as to be injurious to the health of the persons employed therein and so that all gases, vapors, dust or other impurities injurious to health, which are generated in the course of the manufacturing process or handicraft carried on therein shall, so far as practicable, be rendered harmless.

SEC. 52. If, in a workshop or factory which is within the provisions of the preceding section, any process is carried on by which dust is caused which may be inhaled to an injurious extent by the persons employed therein, and it appears to an inspector of factories and public buildings that such inhalation would be substantially diminished without unreasonable expense by the use of a fan or by other mechanical means, such fan or other mechanical means, if he so directs, shall be provided, maintained and used.



SEC. 53. A criminal prosecution shall not be instituted for any violation of the provisions of the two preceding sections unless such employer neglects, for four weeks after the receipt of a notice in writing, to make such changes in his factory or workshop as shall be ordered by an inspector of factories and public buildings.

SEC. 69. Deductions shall not be made from the wages of \* \* \* minors who are paid by the day or hour, and are employed in manufacturing or mechanical establishments, for time during which the machinery is stopped, if said \* \* \* minors are refused the privilege of leaving the mill while the damage to said machinery is being repaired; and if such employees are detained in their workrooms during the time of the breaking down of machinery, they shall not be compelled to make up time lost by such breakdown unless they are compensated therefor at their regular rates of wages. Whoever violates the provisions of this section shall be punished by a fine of not more than twenty dollars for each offense.

SEC. 70. Whoever violates a provision of this chapter for which no specific penalty is provided shall be punished by a fine of not more than one hundred dollars.

#### ACTS OF 1902.

##### CHAPTER 350.—*Employment on elevators.*

SECTION 1. All elevators for the carriage of freight or passengers, running at a speed of more than one hundred feet a minute, shall be operated by competent persons not less than eighteen years of age, and no other person shall operate or have the care or charge of such an elevator.

SEC. 2. No elevator for the carriage of freight or passengers shall be operated by or placed in charge of any person under sixteen years of age.

SEC. 3. Any person, firm or corporation violating any provision of this act by operating or causing an elevator to be operated or to be taken care or charge of in any manner contrary to the provisions of this act shall be punished by a fine of not less than twenty-five nor more than one hundred dollars for each offense.

#### MICHIGAN.

##### COMPILED LAWS OF 1897.

##### *Hours of labor—Age limit—Cleaning machinery in motion.*

SECTION 5365. No male child under fourteen years of age or female under fifteen years of age shall be employed at labor in factories, or in manufacturing establishments or mercantile industries in this State, for a longer period than fifty-four hours in any week.

SEC. 5366. No child under twelve years of age shall be employed in any factory, manufacturing or mercantile establishment within this State. It shall be the duty of every person employing children under the age of fourteen years to keep a register in which shall be recorded the name, age and residence of every person so employed by him. And it shall be unlawful for any factory, manufacturing or mercantile establishment to hire or employ any child under the age of fourteen years without first receiving the permission, in writing, by the parent or guardian, stating the name and age of said child. If said child have no parent or guardian, there shall be a written statement under oath by said child.

SEC. 5367. Every person, firm or corporation employing such children in any factory, manufacturing or mercantile establishment shall require the permit or affidavit mentioned in section two of this act [section 5366] to be executed before such child shall be permitted to enter upon the discharge of his duties or employment. No person, firm or corporation employing less than ten persons or children shall be deemed a manufacturing or mercantile establishment within the meaning of this act.

SEC. 5369. \* \* \* no minor under fourteen years of age shall be allowed to clean machinery while in motion. \* \* \*

SEC. 5372. Any person who violates or omits to comply with any of the foregoing provisions of this act [sections 5365 to 5372], or who suffers or permits any child to be employed in violation of its provisions, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not to exceed one hundred dollars or sixty days imprisonment, or both in the discretion of the court.



*Certain employments forbidden.*

SECTION 5553. Any person having the care, custody, or control of any child under sixteen years of age, who shall exhibit, use, or employ, or who shall apprentice, give away, let out or otherwise dispose of any such child to any person in or for the vocation, service or occupation of rope or wire walking, gymnast, contortionist, rider, or acrobat, dancing or begging, in any place whatsoever, or for any obscene, indecent, or immoral purpose, exhibition or practice whatsoever, or for any exhibition injurious to the health or dangerous to the life or limb of such child, or who shall cause, procure, or encourage such child to engage therein, and any person who shall take, receive, hire, employ, use, exhibit, or have in custody any such child for any of the purposes mentioned in this section, shall be deemed guilty of a misdemeanor.

SEC. 5557. Any person who shall sell, give away, or in any way furnish to any minor child any book, pamphlet, or other printed paper or other thing, containing obscene language, or obscene prints, pictures, figures or descriptions tending to the corruption of the morals of youth, or any newspapers, pamphlets or other printed paper devoted to the publication of criminal news, police reports, or criminal deeds, and any person who shall in any manner hire, use, or employ such child to sell, give away, or in any manner distribute such books, pamphlets, or printed papers, and any person having the care, custody, or control of any such child, who shall permit him or her to engage in any such employment, shall on conviction thereof be deemed guilty of a misdemeanor.

## ACTS OF 1901.

Act No. 113.—*Hours of labor—Age limit—Night work—Dangerous employments forbidden.*

SECTION 1. No male under the age of eighteen years and no female under the age of twenty-one years shall be employed in any manufacturing establishment in this State for any longer period than sixty hours in one week unless for the purpose of making necessary repairs to machinery in order to avoid the stoppage of the ordinary running of the establishments, and no male under the age of eighteen years and no female under the age of twenty-one years shall be employed in any store in this State employing more than ten persons for a longer period than sixty hours in one week: *Provided*, That no more than ten hours shall be exacted from such male minors or females under twenty-one years on any day unless for the purpose of making a shorter work day on the last day of the week.

SEC. 2 (as amended by act No. 171, Acts of 1905). No child under the age of fourteen years shall be employed, permitted or suffered to work in any theater, concert hall or place of amusement where intoxicating liquors are sold or in any mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, passenger or freight elevator, factory or workshop, telegraph or messenger service within this State. It shall be the duty of every person employing children to keep a register in which shall be recorded the name, birthplace, age and place of residence of every person employed by him or her under the age of sixteen years and no child shall be employed between the hours of six o'clock p. m. and seven o'clock a. m. in any manufacturing establishment or workshop in this State and it shall be unlawful for any mercantile institution, store, office, hotel, laundry, manufacturing establishment, bowling alley, workshop, telegraph or messenger service or any person coming within the provisions of this act to hire or employ any child under the age of sixteen years without there is first provided and placed on file a sworn statement made by the parent or guardian, stating the age, date and place of birth of said child and that the child can read and write the English language: *Provided, however*, That if said child has been born in a foreign country, not having been a resident of the United States for three years prior to the application for permit to be employed between the age of fourteen and sixteen years a permit shall be issued to said child upon proof that said child can read and write. If said child have no parent or guardian then said statement shall be made by the child, which statement shall be kept on file by the employer, and be returned to the child upon leaving his employ, and which said register and statement shall be produced for inspection on demand of any factory inspector appointed under this act: *Provided*, That in the city of Detroit and the city of Grand Rapids all sworn statements shall be made before a deputy factory inspector.



SEC. 3. No child under the age of sixteen years shall be employed by any person, firm or corporation conducting any manufacturing establishment in this State, at employment whereby its life or limb is endangered, or its health is likely to be injured, or its morals may be depraved, by such employment. No female under the age of twenty-one years and no male under the age of eighteen years shall be allowed to clean machinery while in motion.

SEC. 4. Factory inspectors shall have power to demand a certificate of physical fitness from the county physician, who shall make such examination free of charge, in the case of persons who seem physically unable to perform the labor at which they may be employed, and shall have power to prohibit the employment of any person that can not obtain such a certificate: *Provided*, This section shall not apply except to children under sixteen years of age.

#### ACTS OF 1903.

##### Act No. 106.—*Tender of employment away from home.*

SECTION 1. \* \* \* it shall be unlawful for any person to make a tender of inducement to go away from the home locality to work, to any child under sixteen years of age unless the written consent of the parents of such child has been first obtained, as well as the consent of the truant officer or county agent of the board of corrections and charities for the locality where said child belongs; and in case such consent is obtained and the child goes abroad under the influence of the inducements so offered, such child under sixteen years of age shall be safely returned to its home at any time when its parents shall request, in writing, such return. \* \* \*

SEC. 3. Every person found guilty of violating the provisions of this act shall be punished by a fine not exceeding twenty-five dollars or by imprisonment of not less than ten nor more than sixty days.

#### MINNESOTA.

##### GENERAL STATUTES OF 1894.

##### *Hours of labor—Earnings of minors.*

SECTION 2240 (as amended by chapter 49, Acts of 1895). In all trades, professions, callings and departments of labor and in all manufactories, workshops, mills and other places wherein persons are employed to perform labor for hire or reward, in this State, the time of labor for the persons so employed and performing labor, shall not exceed ten hours for each day, and any owner, stockholder or overseer, employer, clerk or foreman who shall compel any person or shall permit any child under the age of fourteen years, so employed, to labor for any more than ten hours in any one day, where such owner, stockholder or overseer, clerk or foreman has control, such person so offending shall be liable to a prosecution in the name of the State of Minnesota, before any justice of the peace, of [or] court of competent jurisdiction of the county wherein the same occurs, and upon conviction thereof shall be fined in any sum not less than ten nor more than one hundred dollars: *Provided*, That the provisions of this section shall not apply to agricultural laborers and domestics employed by the month and to persons engaged in the care of live stock: *And provided further*, That extra labor may be performed for extra compensation, except in the case of children under fourteen years.

SEC. 2247. It shall be necessary for the parent or guardian of such minor person as may be in service to notify the party employing such minor that such parent or guardian claims the wages of such minor and in default of such notification payment to such minor of wages so earned shall be valid.

##### *Earnings of minors.*

SECTION 5461. The earnings of any minor child of any debtor within this State, or the proceeds thereof, shall not be liable to attachment, garnishment, or sale on any final process of a court, in any action against such debtor, by reason of any debt or liability of such debtor not contracted for the especial benefit of such minor child.



*Certain employments forbidden—Hours of labor.*

SECTION 6539. A person who employs, or causes to be employed, or who exhibits, uses, or has in his custody for the purpose of exhibiting or employing, any child apparently or actually under the age of sixteen years, or who, having the care, custody, or control of such child as parent, relative, guardian, employer, or otherwise, sells, lets out, gives away, or in any way procures, or consents to the employment or exhibition of such a child, either,

1. As a rope or wire walker, dancer, gymnast, contortionist, rider, or acrobat; or,
2. In begging or receiving alms, or in any mendicant occupation; or,
3. In any indecent or immoral exhibition or practice; or,
4. In any practice or exhibition dangerous or injurious to the life, limb, health, or morals of the child;

\* \* \* \* \*

Is guilty of a misdemeanor.

SEC. 6541. A person who compels a child under sixteen years of age to labor more than ten hours in any day in any factory, workshop or mercantile or manufacturing business, is guilty of a misdemeanor.

## ACTS OF 1895.

CHAPTER 171.—*Age limit—Night work—School attendance—Employment on elevators.*

SECTION 1 (as amended by chapter 360, Acts of 1897). No child under fourteen (14) years of age shall be employed at any time in any factory or workshop, or about any mine. No such child shall be employed in any mercantile establishment nor in the service of any telegraph, telephone or public messenger company except during the vacation of the public schools in the town where such child is employed. No child under sixteen (16) years of age shall be employed at any occupation dangerous or injurious to life, limb, health or morals; nor at any labor of any kind outside of the family of such child's residence before six o'clock in the morning, nor after seven o'clock in the evening, nor more than ten (10) hours in any one day, nor more than sixty hours in any one week, except in accordance with the following express permission or condition, to wit: Children not less than fourteen years of age may be employed in mercantile establishments on Saturdays and for ten days each year before Christmas until ten (10) o'clock in the evening: *Provided, however,* That this permission shall not be so construed as to permit such children to toil more than ten hours in any one day, nor over sixty hours in any one week.

SEC. 2. No child under the age below which all children are by law required to attend school [16 years] shall in the year next succeeding any birthday of said child be employed at any occupation during the hours in which the public schools in the town or city in which he resides are in session, unless or until in said year he has attended some school for at least a period of time equal to that required by law for attendance of school.

SEC. 3. The commissioner of labor, the factory inspector or any assistant factory inspector shall have power to demand a certificate of physical fitness from some regularly licensed physician in the case of children who may seem physically unable to perform the labor at which they may be employed, and no minor shall be employed who can not obtain such a certificate.

SEC. 4. No child under sixteen years of age who can not read and write simple sentences in the English language shall, except in vacations of the public schools be employed at any indoor occupation: *Provided,* Such child is not a regular attendant at a day or evening school.

SEC. 5 (as amended by chapter 360, Acts of 1897). Whenever it appears upon due examination that the labor of any minor who would be debarred from employment under the provisions of sections two and four of this act is necessary for the support of the family to which said minor belongs, or for his own support, the school board or board of school trustees of the city, village or town in which said child resides may, in the exercise of their discretion, issue a permit or excuse authorizing the employment of such minor within such time or times as they may fix.

SEC. 6. No person, firm or corporation shall employ or permit any child under sixteen (16) years of age to have the care, custody, management or operation



of any elevator, or permit any person under eighteen (18) years of age to have the care, custody, management or operation of any elevator running at a speed of over two (200) hundred feet a minute.

SEC. 7. No child actually or apparently under sixteen (16) years of age shall be employed in any factory, workshop or mercantile establishment, or in the service of any public telegraph, telephone or district messenger company or other corporation, unless the person, firm or corporation employing said child procures and keeps on file the certificate required in the case of such child by the following section, and also keep on file a full and complete list of such children employed therein.

SEC. 8. The employment certificates of children under sixteen (16) years of age called for by this act shall, in cities and towns having a superintendent of schools, be signed by said superintendent or some person authorized by him in writing so to sign the same; in other cities and towns it shall be signed by some member of the school board authorized by vote of said board to sign such certificates. Said certificate shall contain a statement of the name, birthplace, date of birth, age of child at date of statement. This statement shall be signed and acknowledged under oath or affirmation before the person authorized to issue the certificate. The certificate shall also contain a statement or certificate by the officer issuing the same that the child can read at sight and write legibly simple sentences in the English language, or that said child if unable so to read and write is regularly attending a day or evening school or has been excused by the school board from said attendance as provided by section five (5), and that if under the age required by law for the attendance of all children at school [16 years], said child has in the year next preceding the issuing of said certificate attended school as required by law. If attendance has been at a private school there must also be added the signature of the teacher in charge of the same followed by words certifying to school attendance. The person signing the certificate shall have authority to administer the oath provided therein but no fee shall be charged therefor. The commissioner of labor is hereby authorized and directed to prepare blank certificates such as are called for by this section and furnish the same to the superintendents of schools and school boards of the State.

SEC. 9. The statement in the certificate giving the birthplace and age of the child shall be signed by the father, if living, and resident of the same city or town; if not, by his mother; or if his mother is not living, or if living is not a resident of the same city or town, by his guardian; if a child has no father or mother or guardian living in the same city or town his own signature to the certificate may be accepted by the person authorized to approve the same.

SEC. 10. Every factory, workshop, mine, mercantile establishment or other place in which or in connection with which children are engaged at labor of any kind, shall at all times be subject to visitation by the members or agents of the board of education or board of trustees of the city, town or district in which said factory, workshop, mine, establishment or place is situated.

SEC. 12. Every parent or guardian of a child under sixteen (16) years of age who permits the employment of any child contrary to the provisions of this act, or who in making the statement called for by section eight (8) of this act certifies to any materially false statement therein, and every owner, superintendent, agent or overseer of any factory, workshop or mercantile establishment, telegraph, or telephone company, district messenger company or other corporation who employs or permits to be employed therein or thereby any child contrary to the provisions of this act, and any person who employs a child contrary to the provisions of this act or violates the provisions of section ten (10) of this act shall be guilty of a misdemeanor and upon conviction thereof before any competent court shall be fined not less than twenty (20) nor more than (50) dollars for each and every offense. A failure to produce to an officer or employee of the bureau of labor, or to a member or authorized agent of the board of education or board of trustees of the city or school district in which the said child is employed, on demand, the certificate and register required by this act, shall be prima facie evidence of the illegal employment of the child whose certificate is not produced.

Failure on the part of an employer to obtain the employment certificate prescribed in section seven is a violation of the statute, and entitles a plaintiff to a remedy for the negligent acts of the employer. Violation of the law, with consequent injury from the dangerous machinery in use in the defendant's mill was properly held to be prima facie, but not conclusive evidence of a plaintiff's right to recover. 97 N. W. Rep., 137.



**MISSISSIPPI.**

## REVISED CODE OF 1892.

*Enticing for purpose of employment.*

SECTION 1003. Any person who shall persuade, entice, or decoy away from its father or mother, with whom it resides, any child under the age of twenty-one years if a male, or eighteen if a female, being unmarried, for the purpose of employing such child without the consent of its parents, or one of them, shall, upon conviction, be punished by a fine of not more than twenty dollars, or imprisonment in the county jail not more than thirty days, or both.

## ACTS OF 1904.

CHAPTER 144.—*Employment while parents live in idleness.*

SECTION 1. Sections 1322, \* \* \* of the Code of 1892, are hereby repealed, and the following act adopted, viz:

The following persons are and shall be punished as vagrants, viz.:

\* \* \* \* \*

(m) All persons who are able to work and do not work, but hire out their minor children or allow them to be hired out, and live upon their wages.

**MISSOURI.**

## REVISED STATUTES OF 1899

*Certain employments forbidden—Age limit.*

SECTION 2186. It shall be unlawful for any person having the care, custody or control of any child under the age of fourteen years to exhibit, use or employ, or in any manner, or under any pretense, sell, apprentice, give away, let out or otherwise dispose of any such child to any person in or for the vocation or occupation, service or purpose of singing, playing on musical instruments, rope or wire walking, dancing, begging or peddling, or as a gymnast, contortionist, rider or acrobat in any place whatsoever, or for any obscene, indecent or immoral purpose, exhibition or practice whatsoever, or for or in any business, exhibition or vocation injurious to the health or dangerous to the life or limb of such child, or cause, procure or encourage any such child to engage therein. Nothing in this section contained shall apply to or affect the employment or use of any such child as a singer or musician in any church, school or academy, or at any respectable entertainment, or the teaching or learning the science or practice of music.

SEC. 2187. It shall also be unlawful for any person to take, receive, hire, employ, use, exhibit or have in custody any child under the age and for the purposes prohibited in section 2186 of this article.

SEC. 2188. Any person convicted under the provisions of the two preceding sections shall for the first offense be fined not exceeding one hundred dollars, or imprisoned in the county jail not exceeding three months, or both, in the discretion of the court, and upon conviction for a second or any subsequent offense, shall be fined in any sum not exceeding five hundred dollars, or imprisoned in the penitentiary for a term not exceeding two years, or both, in the discretion of the court.

SEC. 2189. No child under the age of fourteen years shall be employed in any manufacturing or mechanical establishment in this State wherein steam, water or any other mechanical power is used in the manufacturing process carried on therein, or, where the work to be done by such child would, in the opinion of two reputable physicians in the locality where such work is to be done, be dangerous to the health of such child.

SEC. 2190. Any person, firm or corporation, or its agent, who employs, and any parent or person in charge of such child who permits the employment of such child in violation of this article, shall be deemed guilty of a misdemeanor, and shall, upon conviction, be fined not less than ten nor more than one hundred dollars, or imprisonment [imprisoned] in the county jail for a period of



not less than two days nor more than ten days, or both fined and imprisoned, for each offense: *Provided*, That extreme poverty of the parent, or person in charge of such child, shall be a good defense to such proceeding.

*Cleaning machinery.*

SECTION 6434. No minor \* \* \* shall be required to clean any part of the mill, gearing or machinery in any such establishment in this State, while the same is in motion, or work between the fixed or traversing parts of any machine while it is in motion by the action of steam, water or other mechanical power.

*Employment in mines.*

SECTION 8811 (as amended by act, page 211, Acts of 1901, and act, page 237, Acts of 1905).

\* \* \* \* \*

No male person under the age of fourteen years, or female of any age, shall be permitted to enter any mine to work therein; nor shall any boy under the age of sixteen years, unless he can read or write, be allowed to work in any mine. Any party or person neglecting or refusing to perform the duties required to be performed by the provisions of this article shall be deemed guilty of a misdemeanor, and punished by a fine in the discretion of the court trying the same, subject, however, to the limitations as provided by \* \* \* [statute].

SEC. 8812. No owner, agent or operator of any mine operated by shaft or slope shall place in charge of any engine whereby men are lowered into or hoisted out of the mines any but an experienced, competent and sober person not under eighteen years of age. \* \* \*

*Night work in bakeries.*

SECTION 10088. \* \* \* No person under the age of sixteen years shall be employed in any bake shop between the hours of nine o'clock at night and five o'clock in the morning.

ACTS OF 1905.

*Age limit—School attendance.*

(Page 146.)

SECTION 1. Every parent, guardian or other person in the State of Missouri having charge and control of a child between the ages of eight and fourteen years shall cause such child to attend regularly some day school, public, private, parochial or parish, not less than one-half of the entire time the school which said child attends is in session, or shall provide such child at home with such regular daily instruction during the usual hours as shall be, in the judgment of a court having competent jurisdiction, substantially equivalent at least to the instruction given the children of like age at said day school in the locality in which said child resides: *Provided*, That every parent, guardian, or person in the State of Missouri having charge and control of a child between the ages of fourteen and sixteen years who is not actually and regularly and lawfully engaged in some useful employment or service, shall cause said child to attend regularly some day school as aforesaid.

SEC. 2. A child between the ages aforesaid may be excused temporarily from complying with the provisions of this act, in whole or in part, if it be shown to the satisfaction of a court of competent jurisdiction that said parent or guardian, or person having charge and control of said child is not able through extreme destitution to provide or obtain in any way proper clothing for said child; or that said child is mentally or physically incapacitated to attend school for the whole period required, or any part thereof, or that there is no public school taught within two and one-half miles of the residence of said child by the nearest traveled road, or that the labor of said child is absolutely necessary for the support of the family, or that said child has completed the common school course as prescribed by constituted authority or its equivalent and has received a certificate of graduation therefrom.

SEC. 3. The board having charge of a public school in a city or district of three thousand or more population by the last census may appoint, and remove at pleasure, one or more attendance officers to enforce the provisions of this



act, and shall fix the compensation and manner of performance of the duties of said attendance officer, and shall pay them from the public school funds; and the attendance officers, as aforesaid, \* \* \* shall have the right to visit and enter any office, or factory or business house employing children as aforesaid; shall have the right to acquire a properly attested certificate of the attendance of any child or children at such day school: \* \* \*

SEC. 7. No child between eight and fourteen years of age shall be employed in any mine, factory, workshop, mercantile establishment, or in any other manner, during the usual school hours unless the person employing him, shall first procure a certificate from the superintendent or teacher of the school he attended stating that such child attended school for the period required by law, or has been excused from attendance as provided in section two; and it shall be the duty of such superintendent or teacher to furnish such certificate upon application of the parent, guardian or other persons having control of such child entitled to the same.

SEC. 8. Every owner, superintendent or officer of any mine, factory, workshop or mercantile establishment, and any other person who shall employ any child between eight and fourteen years of age contrary to the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction, shall be fined for each offense in a sum not less than twenty nor more than fifty dollars and costs.

## MONTANA.

### CONSTITUTION.

#### ARTICLE 18.—*Employment in mines.*

SECTION 3. It shall be unlawful to employ children under the age of sixteen (16) years of age in underground mines.

### CODES AND STATUTES—1895.

#### POLITICAL CODE.

##### *Employment during school term—Illiterates.*

SECTION 1920 (as amended by chapter 45, Acts of 1903). All parents, guardians and other persons who have care of children, shall instruct them, or cause them to be instructed in reading, spelling, writing, English grammar, geography, physiology and hygiene, and arithmetic. Every parent, guardian or other person having charge of any child between the ages of eight and fourteen years shall send such child to a public, private, or parochial school, for the full time that the school attended is in session, which shall in no case be for less than sixteen weeks during any current year, and said attendance shall begin within the first week of the school term, unless the child is excused from such attendance \* \* \*, upon satisfactory showing, either that the bodily or mental condition of the child does not permit of its attendance at school, or that the child is being instructed at home by a person qualified, \* \* \* or that there is no school taught the required length of time within  $2\frac{1}{2}$  miles of the residence of such child by the nearest traveled road: *Provided*, That no child shall be refused admission to any public school on account of race or color. \* \* \*

SEC. 1921 (as amended by chapter 45, Acts of 1903). No child under fourteen years of age shall be employed or be in the employment of any person, company or corporation during the school term and while the public schools are in session, unless such child shall present to such person, company or corporation an age and schooling certificate herein provided for. An age and schooling certificate shall be approved only by the superintendent of schools, or by a person authorized by him, in city or other districts having such superintendent, or by the clerk of the board of trustees in village and township districts not having such superintendent, upon a satisfactory proof of the age of such minor and that he has successfully completed the studies enumerated in section 1920 of this article; or if between the ages of fourteen and sixteen years, a knowledge of his or her ability to read and write legibly the English language. The age and schooling certificate shall be formulated by the superintendent of public instruction and the same furnished, in blank, by the clerk of the board of trustees or the clerk of the district. Every person[,] company, or corporation employing any child



under sixteen years of age, shall exact the age and schooling certificate prescribed in this section, as a condition of employment and shall keep the same on file, and shall upon the request of the truant officer hereinafter provided for, permit him to examine such age and schooling certificate. Any person, company, or corporation, employing any minor contrary to the provisions of this section shall be fined not less than twenty-five nor more than fifty dollars for each and every offense.

SEC. 1922 (as amended by chapter 45, Acts of 1903). All minors over the age of fourteen and under the age of sixteen years, who can not read and write the English language shall be required to attend school as provided in section 1920, of this article and all the provisions of said section shall apply to said minors: *Provided*, That such attendance shall not be required of such minors after they have secured a certificate from the superintendent of schools in districts having superintendents, or the clerk of the board of trustees in districts not having superintendents, that they can read, and write the English language. No person, company or corporation shall employ any such minor during the time schools are in session, or having such minor in their employ shall immediately cease such employment, upon notice from the truant officer who is hereinafter provided. Every person, company, or corporation violating the provisions of this section shall be fined not less than twenty-five nor more than fifty dollars for each and every offense.

SEC. 1924 (as amended by chapter 45, Acts of 1903). \* \* \* The truant officer shall be vested with police powers, the authority to serve warrants, and have authority to enter workshops, factories, stores and all other places where children may be employed, and do whatever may be necessary, in the way of investigation or otherwise to enforce the provisions of this act; \* \* \*

#### CIVIL CODE.

##### *Earnings of minors.*

SECTION 299. The wages of a minor employed in service may be paid to him until the parent or guardian entitled thereto gives the employer notice that he claims such wages.

#### PENAL CODE.

##### *Certain employments forbidden.*

SECTION 472. Any person, whether as parent, relative, guardian, employer or otherwise, having in his care, custody or control any child under the age of sixteen years, who shall sell, apprentice, give away, let out or otherwise dispose of any such child to any person, under any name, title or pretense, for the vocation, use, occupation, calling, service, or purpose of singing, playing on musical instruments, rope walking, dancing, begging or peddling in any public street or highway, or in any mendicant or wandering business whatever, and any person who shall take, receive, hire, employ, use or have in custody any child for such purposes, or either of them, is guilty of a misdemeanor.

#### ACTS OF 1905.

##### CHAPTER 16.—*Employment in mines.*

SECTION 1. Any person, corporation, stock company or association of persons, owning or operating any underground mine, or any officer, agent, foreman or boss, having the control or management of employees, or having the power to hire or discharge employees, who shall employ, or knowingly permit to be employed, any child under the age of sixteen years, for work or service in any such mine, or the underground workings thereof, or permit or allow any such child to render or perform any work or service whatever in such mine, whether under contract of employment or otherwise, shall be guilty of a misdemeanor and punishable as hereinafter provided.

SEC. 2. Any parent, guardian or other person having the care, custody, or control of any child under the age of sixteen years, who shall permit, suffer, or allow such child to work in any mine having underground workings, or who shall permit or allow any such child over whom they may have such care, custody, or control to retain employment in any such mine, or who, after having knowledge that any such child has taken employment in any such mine, or is per-



forming work or service therein, whether under contract of employment or not, shall fail forthwith to notify the person or corporation owning or operating such mine, or some officer, foreman or employee thereof having the power to hire or discharge employees, of the age of such child, shall be guilty of a misdemeanor and punishable as hereinafter provided.

SEC. 3. Any person or corporation violating any of the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty-five (\$25) dollars nor more than (\$500) five hundred dollars, or by imprisonment in the county jail for a period of not less than thirty days nor more than six months, or by both such fine and imprisonment.

## NEBRASKA.

### COMPILED STATUTES OF 1881—TENTH EDITION, 1901.

#### PART III.—CRIMINAL CODE.

##### *Employment during school term.*

SECTION 6953. Any male or female child under the age of ten years shall not be employed in any manufacturing, mechanical industrial or merchantile [mercantile] establishment.

SEC. 6954. Any male or female child under the age of fourteen years shall not be employed in any manufacturing, mechanical, industrial or merchanttle [mercantile] establishment, except during the vacations of the public schools; unless during the year next preceding such employment, said child has for at least twenty weeks attended some public or private day school where the English [language] is taught; nor shall such employment continue, unless such child shall in each and every year attend school as herein provided, and no child shall be so employed who does not present a certificate signed by the president and secretary of the school board of the school district in which said child resides, of their compliance with the requirements of this section. Nor shall any owner, superintendent or overseer of any such establishment parent or guardian consent to or permit the employment of any child contrary to the provisions of this act.

SEC. 6955. Any owner, superintendent or overseer of any such establishment shall require and keep on file, open to the inspection of the public, a certificate of the age, place of birth and residence of every male and female child under sixteen years of age employed therein, so long as such child is so employed; which certificate shall also state, in case the child is under fourteen years of age, the amount of said child's school attendance during the [year] next preceding his employment, and such certificate shall be signed by the president and secretary of the school board of the school district in which such child resides, and the forms of certificate herein referred to shall be approved by the attorney-general of this State.

SEC. 6955a. Any person who shall be convicted of a violation of any of the provisions of this act shall pay for every such offense a fine of not less than twenty dollars nor more than fifty dollars: *Provided, however,* That no conviction shall be had under this act, unless the proceedings therefor shall be commenced within one year after the offense shall have been committed.

SEC. 6955b. It is hereby made the duty of the deputy labor commissioner of this State upon complaint being filed with him to inspect any and all establishments to which this act applies, and ascertain whether any of the provisions of this act have been violated. Whenever it shall come to his knowledge that any of the provisions of this act have been or [are] being violated, it shall be his duty to cause the same to be enforced: *Provided, however,* That nothing in this section contained shall be construed to prevent any other person from causing the enforcement of the provisions of this act.

## NEW HAMPSHIRE.

### PUBLIC STATUTES OF 1891.

#### CHAPTER 92.—*Employment during school term.*

SEC. 18 (as amended by chapter 70, Acts of 1899). Truant officers shall, if required by the school board, enforce the laws prohibiting the employment of children in manufacturing, mechanical, or mercantile establishments who have not attended school the prescribed time; and for this purpose, they may, when



so authorized and required by vote of the school board, visit the manufacturing, mechanical, and mercantile establishments in their respective cities and towns, and ascertain whether any children under the age of sixteen are employed therein contrary to the provisions of law, and they shall report any cases of such illegal employment to the school board; and the truant officers, when authorized as aforesaid, may demand the names of all children under sixteen years of age employed in such manufacturing, mechanical, and mercantile establishments, and may require that the certificates and lists of such children provided for by law shall be produced for their inspection. Truant officers shall inquire into the employment, otherwise than in such manufacturing, mechanical, and mercantile establishments, of children under the age of sixteen years, during the hours when the public schools are in session, and may require that the certificates of all children under sixteen shall be produced for their inspection; and any such officer may bring a prosecution against a person or corporation employing any such child, otherwise than as aforesaid, during the hours when the public schools are in session, contrary to the provisions of law. A refusal or failure on the part of an employer of children under sixteen years of age to produce the certificate required by law, when requested by a truant officer, shall be prima facie evidence of the illegal employment of the child whose certificate is not produced. Truant officers shall have authority without a warrant to take and place in school any children found employed contrary to the laws relating to the employment of children, or violating the laws relating to the compulsory attendance at school of children between the ages of six and sixteen years.

#### CHAPTER 93.—*Age limit—Illiterates.*

SECTION 10 (as amended by chapter 61, Acts of 1901). No child under the age of twelve years shall be employed in any manufacturing establishment. No child under the age of fourteen years shall be employed in any manufacturing establishment, nor in any mechanical, mercantile, or other employment during the time in which the public schools are in session in the district in which he resides.

SEC. 11 (as amended by chapter 61, Acts of 1901). No child under the age of sixteen years shall be employed in any manufacturing establishment, or in any mechanical, mercantile, or other employment, during the time in which the public schools are in session in the district in which he resides, without first presenting a statement of his age from his parent or guardian, sworn to before the superintendent of schools or, if there is no superintendent of schools, by some person authorized by the school board of the district in which such child is employed.

And no child under the age of sixteen years shall be employed as aforesaid during the time in which the public schools are in session in the district in which he resides without first presenting a certificate from the superintendent of schools or, if there is no superintendent of schools, some person authorized by the school board, that such child can read at sight and write legibly simple sentences in the English language. And any superintendent of schools or person authorized by the school board who certifies falsely as to matters prescribed by this section shall be fined not less than twenty nor more than fifty dollars for each offense.

SEC. 12 (as amended by chapter 61, Acts of 1901). No minor shall be employed in any manufacturing establishment, or in any mechanical, mercantile, or other employment, who can not read at sight and write legibly simple sentences in the English language, while a free public evening school is maintained in the district in which he resides, unless he is a regular attendant at such evening school or at a day school: *Provided*, That upon presentation by such minor of a certificate signed by a regular practicing physician, and satisfactory to the superintendent of schools, or, where there is no superintendent of schools, the school board, showing that the physical condition of such minor would render such attendance in addition to daily labor prejudicial to his health, said superintendent of schools or school board shall issue a permit authorizing the employment of such minor for such period as said superintendent of schools or school board may determine. Said superintendent of schools or school board, or teachers acting under authority thereof, may excuse any absence from such evening school arising from justifiable cause. Any parent, guardian, or custodian who permits to be employed any minor under his control in violation of the provisions of this section shall forfeit not more than twenty dollars for the use of the evening schools of such town or city.



SEC. 13 (as amended by chapter 61, Acts of 1901). If any owner, agent, superintendent, or overseer of a manufacturing, mechanical, or mercantile establishment, or any other person, shall employ any child in violation of the provisions of either of the three preceding sections, he shall be fined not exceeding fifty dollars for each offense, for the use of the district.

SEC. 18. It shall be the duty of the school board to prosecute offenders for violations of the provisions of this chapter. If they neglect to perform this duty they shall forfeit twenty dollars for each neglect, for the use of the district, to be recovered in the name of the district by the selectmen of the town. All necessary expenses incurred in such proceedings shall be paid by the district.

SEC. 19. No prosecution under this chapter shall be sustained unless begun within one year after the offense is committed.

#### CHAPTER 180.—*Hours of labor.*

SECTION 14 (as amended by chapter 102, Acts of 1905). \* \* \* no minor under eighteen years of age shall be employed in a manufacturing or mechanical establishment for more than ten hours in one day, except in the following cases:

I. To make a shorter day's work for one day in the week.

II. To make up time lost on some day in the same week in consequence of the stopping of machinery upon which such person was dependent for employment.

III. When it is necessary to make repairs to prevent interruption of the ordinary running of the machinery.

In no case shall the hours of labor exceed sixty in one week, nor fifty-eight in one week during the months of July and August.

SEC. 15. The proprietors of every such establishment shall keep posted in a conspicuous place in every room where such persons are employed a notice printed in plain, large letters, stating the exact time of beginning and of stopping work in the forenoon and in the afternoon, and the number of hours' work required of them each day of the week.

SEC. 16. If any owner, agent, superintendent, or overseer of any such establishment shall willfully violate the provisions of either of the two preceding sections, he shall be fined not exceeding fifty dollars for each offense.

SEC. 17. A certificate of the age of a minor, made by him and by his parents or guardian and presented to the employer at the time the minor is employed, shall be conclusive evidence of his age upon a prosecution for the violation of the provisions of section fourteen.

SEC. 18. If any person shall make and utter a false certificate in regard to the age of a minor, with intent to evade the provisions of this chapter, he shall be fined twenty-five dollars, or be imprisoned thirty days, or both, for each offense.

SEC. 19. \* \* \* Prosecutions under sections sixteen and eighteen shall be barred unless begun within one year after the offense was committed.

#### CHAPTER 265.—*Certain employments forbidden.*

SECTION 3. If any person shall employ or exhibit a child under the age of fourteen years in dancing, playing on musical instruments, singing, walking on a wire or rope, or riding or performing as a gymnast, contortionist, or acrobat in any circus or theatrical exhibition, or in any public place whatsoever, or shall cause, procure, or encourage any such child to engage therein, or if any person having the custody or control of any such child shall permit him to be so employed, such person shall be fined not exceeding one hundred dollars; but nothing in this section shall be construed to prevent the education of children in vocal and instrumental music, or their employment as musicians in any church, chapel, or school, or school exhibition, or to prevent their taking part in any concert or musical exhibition.

#### ACTS OF 1903.

#### CHAPTER 95.—*Employment in barrooms.*

SECTION 17 (as amended by chapter 49, Acts of 1905). It shall not be lawful

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2. To permit any girl \* \* \* to sell or serve any liquor on the premises; or to permit any male person under the age of twenty-one years to sell or serve any liquor on the premises, except to bona fide registered guest in their rooms and in dining rooms with meals under licenses of the first class.



## NEW JERSEY.

## GENERAL STATUTES—1895.

*Hours of labor.*

(Page 2350.)

SECTION 66. \* \* \* , fifty-five hours shall constitute a week's work in any factory, workshop, or establishment where the manufacture of any goods whatever is carried on; and the periods of employment shall be from seven o'clock in the forenoon until twelve o'clock noon, and from one o'clock in the afternoon until six o'clock in the evening of every working day except Saturday, upon which last named day the period of employment shall be from seven o'clock in the forenoon until twelve o'clock noon.

SEC. 67. No person under the age of eighteen years, male or female, \* \* \* shall be employed in any factory, workshop, or manufacturing establishment except during the periods of employment hereinbefore mentioned: *Provided*, That the provisions in this act in relation to the hours of employment shall not apply to or affect any person engaged in preserving perishable goods in fruit canning establishments or in any factory engaged in the manufacture of glass.

SEC. 68. The inspector of factories shall investigate any reported violation of the provisions of this act and of the act to which this is a supplement, after it has been discovered by him or brought to his notice, and may proceed against the violator or violators in the manner prescribed by the act to which this is a supplement.

SEC. 69. Any manufacturer or other employer who shall violate any of the provisions of this act shall be liable to a penalty of one hundred dollars for each offense, to be recovered in the same way and for the same purpose as prescribed in the act to which this is a supplement.

*School attendance.*

(Page 3039.)

SECTION 146. No child under the age of fifteen years shall be employed by any person, company or corporation to labor in any business whatever, unless such child shall have attended within twelve months immediately preceding such employment, some public day or night school, or some well-recognized private school; such attendance to be for five days or evenings every week during a period of at least twelve consecutive weeks, which may be divided into two terms of six consecutive weeks each, so far as the arrangement of school terms will permit, and unless each [such] child or his or her parents or guardians shall have complied with the provisions of the act approved March fifth, eighteen hundred and eighty-three, limiting the employment hours of the labor of children.

Act of March fifth, eighteen hundred and eighty-three, repealed, apparently superseded by Chapter 64, Acts of 1904.

## ACTS OF 1896.

CHAPTER 181.—*Night work in bakeries.*

SECTION 10. (added by chapter 64, Acts of 1903). No person under the age of eighteen years shall be employed, or required, permitted or suffered to work, in a biscuit, bread or cake bakery between the hours of seven o'clock in the afternoon and seven o'clock in the forenoon.

## ACTS OF 1898.

CHAPTER 235.—*Certain employments forbidden.*

SECTION 56. Any person who, whether as parent, relative, guardian, employer, or otherwise, having in his or her custody or control, lawfully or unlawfully, any minor child under the age of eighteen years, who shall sell, apprentice, give away, let out, employ, hire or otherwise dispose of such minor or minors for the purpose of begging, singing and playing on a musical instruments [in-



strument], ropewalking, dancing, or for any mendicant or wandering business whatsoever, or in any immoral conduct or occupation in the streets, roads and other highways or public places of this State, and any person who shall take, receive, hire, employ, use or have in custody any such minor or minors, under the age of eighteen years, and use or employ him, her or them in any such purpose, or any of them, for any mendicant or immoral business whatsoever, either in public or private places within this State, shall be guilty of a misdemeanor, and punished accordingly; and if, upon such conviction, the minor or minors shall have no home or means of support and no one to take proper care of him, her or them, the court may, in its discretion, if it shall appear a humane and proper thing to do, commit such minor or minors to the State reform school for boys, or the State industrial school for girls, until such minor or minors attain the age of eighteen years, or for a less age, in the discretion of the court.

#### ACTS OF 1904.

##### CHAPTER 64.—*Age limit—Hours of labor—Cleaning moving machinery.*

1. No child under the age of fourteen years shall be employed, allowed or permitted to work in any factory, workshop, mill or place where the manufacture of goods of any kind is carried on; any corporation, firm, individual, parent, parents or custodian of any child who shall violate any of the provisions of this section, shall be liable to a penalty of fifty dollars for each offense.

2. The word custodian as used in this act shall include any person, organization or society having the legal custody of a child.

3. If at the time of the employment of a child, the proofs of age specified in subdivisions I. and II. of this section, are filed with the corporation, firm or person employing the child, such proofs shall be conclusive evidence of the age of child in a suit against such employer for a violation of section one: *Provided, however,* That correct copies of all papers, certificates, passports and affidavits relating to such employment shall be mailed, postage prepaid to the department having charge of the enforcement of this act, at Trenton, New Jersey, within twenty-four hours after the same are filed, together with a statement of the legal name of the person, firm or corporation employing such child.

##### I. NATIVE BORN CHILDREN.

The parent, parents or custodian shall make and swear to an affidavit before some officer authorized by the law of this State to take affidavits, setting forth the following facts: The name of the child in full; his or her residence, giving street and number; place where and year, month and day when born; name of father; maiden name of mother; church attended, if any; school last attended and time when, if any, and where the church and school are situated; if child was baptized, name and location of church or parish in which such baptism took place; there must accompany such affidavit a transcript of the record of the child's birth; duly attested by an officer having by law the authority to keep records of birth in the State, county, town or city in which the child was born; if no such birth record can be obtained and the child was baptized, then a certified copy of the baptismal record of the church or parish in which such baptism took place, duly certified as a true copy, under the hand of the person having the custody of such church or parish records, shall accompany the affidavit, and the affidavit shall set forth the age of child at time of baptism.

##### II. FOREIGN BORN CHILDREN.

An affidavit to be made by the same persons and containing the same statement of facts as in the case of native born children, with an additional statement that the child named in the affidavit is the same mentioned and described in the passport under which the child was admitted to this country; a true copy of said passport must in all cases be attached to the affidavit.

##### III. OTHER CHILDREN.

The commissioner shall have power to issue permits of employment to children upon the production of evidence of the child's age satisfactory to him: *Provided,* That he shall first be satisfied that the child can not obtain a transcript of birth record, a baptismal certificate or passport, as provided in either subdivision I. or II.



4. In any suit brought to recover a penalty for violation of section one of this act, a copy of the baptismal record, certified to be a true copy under the hand of the person having the custody of such records for the church or parish in which such child was baptized, shall be prima facie evidence of the child's age (provided, that in case the age of the child is not set forth in the baptismal record, that there shall be other proof showing the age of the child at the time he or she was baptized).

5. The commissioner, assistant or any inspector is hereby empowered to demand of any parent, parents or custodian, proof of the age of a child satisfactory to the commissioner, and such parent, parents or custodian shall, within five days after such demand is made, furnish to such officer proofs of such child's age; and in event of the failure to procure and furnish such proof of age, such child shall be discharged by his or her employer upon notice in writing signed by the commissioner, and shall not be reemployed until such proof of age shall have been furnished to the commissioner; any person violating the provisions of this section shall be liable to a penalty of fifty dollars for each offense.

6. Any one who shall swear falsely to any affidavit or present any certificate or passport which he or she knows to be false, and any person or persons who shall aid, assist or advise the making of a false affidavit or the obtaining of a false certificate or passport, shall be liable to a penalty of fifty dollars for each offense.

7. The commissioner, assistant or the inspectors shall have power to demand a certificate of physical fitness from some regular practicing physician in the case of minors under the age of sixteen years, who, in the judgment of such officer, shall be physically unable to do the work in which such minor is employed, and shall have the power to prohibit the employment of such minor until he or she shall produce a certificate of physical fitness; and any manufacturer or employer who shall retain in his employ a minor after such certificate shall be demanded, shall be liable to a penalty of twenty-five dollars.

8. A corporation, firm or person, owning or operating a place coming under the provisions of this act and employing, allowing or permitting minors under the age of sixteen years to work therein, shall keep or cause to be kept in the main office of such place, in the town or city where such place is located, a register in which shall be recorded the names, places of residence and time of employment of such minors working under certificates, transcripts, passports or affidavits; such registers and certificates, transcripts and affidavits shall be produced for inspection upon demand of the commissioner, assistant or any of the inspectors; truant officers shall have the same right as inspectors to examine such registers and the certificates, transcripts, passports or affidavits, when authorized in writing so to do by the commissioner; any corporation, firm or person failing to keep such register or refusing to permit the persons herein authorized to inspect the same or the certificates, transcripts, passports or affidavits, shall be liable to a penalty of fifty dollars for each offense.

9. No minor under the age of sixteen years shall be employed, permitted or allowed to work in places coming under the provisions of this act, more than ten hours in a day or fifty-five hours in a week; any corporation, firm or person permitting or allowing any violation of the provisions of this section, shall be liable to a penalty of fifty dollars for each offense.

21. No minor under sixteen years of age shall be required, allowed or permitted to clean any part of the gearing or machinery in any place coming under the provisions of this act, while the same is in motion, or to work between the fixed or traversing parts of any machinery while it is in motion by the action of steam, water or other mechanical power.

## NEW YORK.

### REVISED STATUTES—THIRD EDITION—1901.

#### *Certain employments forbidden.*

(Page 428.)

SECTION 18. A person who employs or causes to be employed, or who exhibits, uses, or has in custody, or trains for the purposes of the exhibition, use or employment of, any child actually or apparently under the age of sixteen years; or who having the care, custody or control of such a child as parent, relative,



guardian, employer, or otherwise, sells, lets out, gives away, so trains, or in any way procures or consents to the employment, or to such training, or use, or exhibition of such child; or who neglects or refuses to restrain such child from such training, or from engaging or acting, either

1. As a rope or wire walker, gymnast, wrestler, contortionist, rider or acrobat; or upon any bicycle or similar mechanical vehicle or contrivance; or,

2. In begging or receiving or soliciting alms in any manner or under any pretense, or in any mendicant occupation; or in gathering or picking rags, or collecting cigar stumps, bones or refuse from markets; or in peddling; or,

3. In singing; or dancing; or playing upon a musical instrument; or in a theatrical exhibition; or in any wandering occupation; or

4. In any illegal, indecent or immoral exhibition or practice; or in the exhibition of any such child when insane, idiotic, or when presenting the appearance of any deformity or unnatural physical formation or development; or

5. In any practice or exhibition or place dangerous or injurious to the life, limb, health or morals of the child, is guilty of a misdemeanor. But this section does not apply to the employment of any child as a singer or musician in a church, school or academy; or in teaching or learning the science or practice of music; or as a musician in any concert or in a theatrical exhibition, with the written consent of the mayor of the city, or the president of the board of trustees of the village where such concert or exhibition takes place. Such consent shall not be given unless forty-eight hours previous notice of the application shall have been served in writing upon the society mentioned in section two hundred and ninety-three of the Penal Code [any incorporated society for the prevention of cruelty to children], if there be one within the county, and a hearing had thereon if requested, and shall be revocable at the will of the authority giving it. It shall specify the name of the child, its age, the names and residence of its parents or guardians, the nature, time, duration and number of performances permitted, together with the place and character of the exhibition. But no such consent shall be deemed to authorize any violation of the first, second, fourth or fifth subdivisions of this section.

*Employment during school term.*

(Page 645.)

SECTION 316 (as amended by chapter 459, Acts of 1903, and by chapter 280, Acts of 1905). It shall be unlawful for any person, firm or corporation to employ any child under fourteen years of age, in any business or service whatever, during any part of the term during which the public schools of the district in which the child resides are in session; or to employ any child between fourteen and sixteen years of age who does not, at the time of such employment, present a certificate signed by the superintendent of schools or by the principal or the principal teacher of the city or district in which the child resides or by the principal or the principal teacher of the school where the child has attended or is attending, or by such other officer as the school authorities may designate, certifying that such child during the twelve months next preceding his fourteenth birthday or during the twelve months next preceding his application for such certificate, has attended for not less than one hundred and thirty days the public schools, or schools having an elementary course equivalent thereto, in such city or district and that such child can read and write easy English prose and is familiar with the fundamental operations of arithmetic; or to employ, in a city of the first class or a city of the second class, any child between fourteen and sixteen years of age who has not completed such course of study as the public elementary schools of such city require for graduation from such schools and who does not hold either a certificate of graduation from the public elementary school or the preacademic certificate issued by the regents of the University of the State of New York or the certificate of the completion of an elementary school issued by the department of public instruction, unless the employer of such child, if a boy, shall keep and shall display in the place where such child is employed and shall show whenever so requested by any attendance officer, factory inspector, or representative of the police department, a certificate signed by the school authorities or such school officers in said city as said school authorities shall designate, which school authorities, or officers designated by them, are hereby required to issue such certificates to those entitled to them not less frequently than once in each month during which said evening school is in session and at the close of the session of said evening school, stating that said child has been in



attendance upon said evening school for not less than six hours each week for such number of weeks as will, when taken in connection with the number of weeks such evening school will be in session during the remainder of the current or calendar year, make up a total attendance on the part of said child in said evening school of not less than six hours per week for a period of not less than sixteen weeks, and any person who shall employ any child contrary to the provisions of this section or who shall fail to keep and display certificates as to the attendance of employees in evening schools when such attendance is required by law shall, for each offense, forfeit and pay to the treasurer of the city or village, or to the supervisor of the town in which such child resides, a penalty of fifty dollars, the same, when paid, to be added to the public school moneys of the city, village or district in which such child resides.

*Earnings of minors.*

(Page 1049.)

SECTION 42. Where a minor is in the employment of a person other than his parent or guardian, payment to such minor of his wages is valid, unless such parent or guardian notify the employer in writing, within thirty days after the commencement of such service, that such wages are claimed by such parent or guardian, but whenever such notice is given at any time payments to the minor shall not be valid for services rendered thereafter.

*Age limit—Night work—Hours of labor—Overtime work—Employment on elevators—Cleaning and operating machinery—Polishing.*

(Page 2100.)

SECTION 70 (as amended by chapter 184, Acts of 1903). No child under the age of fourteen years shall be employed, permitted or suffered to work in or in connection with any factory in this State. No child between the ages of fourteen and sixteen years shall be so employed, permitted or suffered to work unless an employment certificate issued as provided in this article shall have been theretofore filed in the office of the employer at the place of employment of such child.

The employment of a child under lawful age is of itself evidence of negligence, where the child is injured on account of such employment. Such a child is not, as a matter of law, chargeable with contributory negligence, nor with the assumption of the risks of his employment. The employer is liable for injuries, though the State makes such employment a misdemeanor. 66 N. E. Rep. 572.

SEC. 71 (as amended by chapter 184, Acts of 1903, and chapter 518, Acts of 1905). Such certificate shall be issued by the commissioner of health or the executive officer of the board or department of health of the city, town or village where such child resides, or is to be employed, or by such other officer thereof as may be designated by such board, department or commissioner for that purpose, upon the application of the parent or guardian or custodian of the child desiring such employment. Such officer shall not issue such certificate until he has received, examined, approved, and filed the following papers duly executed: (1) The school record of such child properly filled out and signed as provided in this article. (2) A passport or duly attested transcript of the certificate of birth or baptism or other religious record showing the date and place of birth of such child. A duly attested transcript of the birth certificate filed according to law with a registrar of vital statistics or other officer charged with the duty of recording births, shall be conclusive evidence of the age of such child. (3) The affidavit of the parent or guardian or custodian of a child, which shall be required, however, only in case such last-mentioned transcript of the certificate of birth be not produced and filed, showing the place and date of birth of such child; which affidavit must be taken before the officer issuing the employment certificate, who is hereby authorized and required to administer such oath, and who shall not demand or receive a fee therefor. In case it shall appear to the satisfaction of the officer to whom application is made, as herein provided, for an employment certificate, that a child for whom such certificate is requested and who has presented the school record and affidavit above provided for, is in fact over fourteen years of age and that satisfactory documentary evidence of such age can be produced which does not fall within any of the provisions of subdivision two of this section, and that none of the papers mentioned in said subdivision exists or can be



produced, then and not otherwise he shall present to the board of health of which he is an officer, or agent for its action thereon, a statement signed by him showing such facts, together with such affidavits or papers as may have been produced before him constituting such evidence of the age of such child, and the board of health, at a regular meeting thereof, may then, in its discretion, in a proper case, by resolution, provide that such evidence of age shall be fully entered on the minutes of such board and shall be received in place of the papers specified and required by subdivision two of this section. On due proof, in like manner, that a child who is a graduate of a public school of the State of New York or elsewhere having a course of not less than eight years, or of a school in the State of New York other than a public school, having a substantially equivalent course of study of not less than eight years duration, and in which a record of the attendance of such child has been kept as required by the compulsory education law, and who produces and files a certificate of graduation duly issued to him therefrom, and who is recorded in the school records as fourteen years of age, is unable to further produce the evidence of age required by subdivision two of this article, the board may, by resolution, permit the issuance to such child of an employment certificate and dispense with such evidence of age as is in said subdivision provided. Such employment certificate shall not be issued until such child farther has personally appeared before and been examined by the officer issuing the certificate, and until such officer shall, after making such examination, sign and file in his office a statement that the child can read and legibly write simple sentences in the English language and that in his opinion the child is fourteen years of age or upwards and has reached the normal development of a child of its age, and is in sound health and is physically able to perform the work which it intends to do. In doubtful cases such fitness shall be determined by a medical officer of the board or department of health. Every such employment certificate shall be signed, in the presence of the officer issuing the same, by the child in whose name it is issued.

SEC. 72 (as amended by chapter 184, Acts of 1903). Such certificate shall state the date and place of birth of the child, and describe the color of the hair and eyes, the height and weight and any distinguishing facial marks of such child, and that, the papers required by the preceding section have been duly examined, approved and filed and that the child named in such certificate has appeared before the officer signing the certificate and been examined.

SEC. 73 (as amended by chapter 184, Acts of 1903). The school record required by this article shall be signed by the principal or chief executive officer of the school which such child has attended and shall be furnished, on demand, to a child entitled thereto or to the board, department or commissioner of health. It shall contain a statement certifying that the child has regularly attended the public schools or schools equivalent thereto or parochial schools for not less than one hundred and thirty days during the school year previous to his arriving at the age of fourteen years or during the year previous to applying for such school record and is able to read and write simple sentences in the English language, and has received during such period instruction in reading, spelling, writing, English grammar and geography and is familiar with the fundamental operations of arithmetic up to and including fractions. Such school record shall also give the age and residence of the child as shown on the records of the school and the name of its parent or guardian or custodian.

SEC. 75. The board or department of health or health commissioner of a city, village or town, shall transmit, between the first and tenth day of each month, to the office of the factory inspector a list of the names of the children to whom certificates have been issued.

SEC. 76 (as amended by chapter 184, Acts of 1903, and chapter 493, Acts of 1905). Each person owning or operating a factory and employing children therein shall keep, or cause to be kept in the office of such factory, a register, in which shall be recorded the name, birthplace, age and place of residence of all children so employed under the age of sixteen years. Such register and the certificate filed in such office shall be produced for inspection upon the demand of the commissioner of labor. On termination of the employment of a child so registered, and whose certificate is so filed, such certificate shall be forthwith surrendered by the employer to the child or its parent or guardian or custodian. The commissioner of labor may make demand on any employer in whose factory a child apparently under the age of sixteen years is employed or permitted or suffered to work, and whose employment certificate is not then filed as required.



by this article, that such employer shall either furnish him within ten days, evidence satisfactory to him that such child is in fact over sixteen years of age, or shall cease to employ or permit or suffer such child to work in such factory. The commissioner of labor may require from such employer the same evidence of age of such child as is required on the issuance of an employment certificate; and the employer furnishing such evidence shall not be required to furnish any further evidence of the age of the child. A notice embodying such demand may be served on such employer personally or may be sent by mail addressed to him at said factory, and if served by post shall be deemed to have been served at the time when the letter containing the same would be delivered in the ordinary course of the post. When the employer is a corporation such notice may be served either personally upon an officer of such corporation, or by sending it by post addressed to the office or the principal place of business of such corporation. The papers constituting such evidence of age furnished by the employer in response to such demand shall be filed with the commissioner of labor and a material false statement made in any such paper or affidavit by any person, shall be a misdemeanor. In case such employer shall fail to produce and deliver to the commissioner of labor within ten days after such demand such evidence of age herein required by him, and shall thereafter continue to employ such child or permit or suffer such child to work in such factory, proof of the giving of such notice and of such failure to produce and file such evidence shall be prima facie evidence in any prosecution brought for a violation of this article that such child is under sixteen years of age and is unlawfully employed.

SEC. 77 (as amended by chapter 184, Acts of 1903). No minor under the age of sixteen years shall be employed, permitted or suffered to work in any factory in this State before six o'clock in the morning, or after nine o'clock in the evening of any day, or for more than nine hours in any one day. No minor under the age of eighteen years, and no female shall be employed, permitted or suffered to work in any factory in this State before six o'clock in the morning, or after nine o'clock in the evening of any day; or for more than ten hours in any one day except to make a shorter work day on the last day of the week; or for more than sixty hours in any one week, or more hours in any one week than will make an average of ten hours per day for the whole number of days so worked. A printed notice, in a form which shall be prescribed and furnished by the commissioner of labor, stating the number of hours per day for each day of the week required of such persons, and the time when such work shall begin and end, shall be kept posted in a conspicuous place in each room where they are employed. But such persons may begin their work after the time for beginning and stop before the time for ending such work, mentioned in such notice, but they shall not otherwise be employed, permitted or suffered to work in such factory except as stated therein. The terms of such notice shall not be changed after the beginning of labor on the first day of the week without the consent of the commissioner of labor. The presence of such persons at work in the factory at any other hours than those stated in the printed notice shall constitute prima facie evidence of a violation of this section of the law.

SEC. 78 (as amended by chapter 184, Acts of 1903). When in order to make a shorter work day on the last day of the week, a minor over sixteen and under eighteen years of age, or a female sixteen years of age or upwards, is to be required or permitted to work in a factory more than ten hours in a day, the employer of such persons shall notify the commissioner of labor in writing, of such intention, stating the number of hours of labor per day, which it is proposed to require or permit, and the time when it is proposed to cease such requirement or permission; a similar notification shall be made when such requirement or permission has actually ceased. A record of the names of the employees thus required or permitted to work overtime, with the amount of such overtime, and the days upon which such work was performed, shall be kept in the office of such factory, and produced upon the demand of the commissioner of labor.

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The word custodian as used in this act [sections 70 to 78, inclusive] shall include any person, organization or society having the custody of said child.

SEC. 79. \* \* \* No child under the age of fifteen years shall be employed or permitted to have the care, custody or management of or to operate an elevator in a factory, nor shall any person under the age of eighteen years be employed or permitted to have the care, custody or management of or to operate an elevator therein running at a speed of over two hundred feet a minute.



Where a boy of fourteen is injured by the voluntary use of an elevator, in a single instance and without suggestion from any one, the master is not liable under the above provision. 76 N. Y. S., 123.

SEC. 81. \* \* \* No male person under eighteen years or woman under twenty-one years of age shall be permitted or directed to clean machinery while in motion. Children under sixteen years of age shall not be permitted to operate or assist in operating dangerous machines of any kind.

SEC. 92 (as amended by chapter 561, Acts of 1903). No male child under the age of eighteen years, nor any female, shall be employed in any factory in this State in operating or using any emery, tripoli, rouge, corundum, stone, carborundum or any abrasive, or emery polishing or buffing wheel, where articles of the baser metals or of iridium are manufactured. The owner, agent or lessee of a factory who employs any such person in the performance of such work is guilty of a misdemeanor and upon conviction thereof shall be fined in the sum of fifty dollars for each such violation. The commissioner of labor, his assistants and deputies, shall enforce the provisions of this section.

*Age limit—Hours of labor—Night work—Lunch time—Employment in basements—Selling newspapers.*

(Page 2114.)

SECTION 160. The provisions of this article shall apply to all villages and cities which at the last preceding State enumeration had a population of three thousand or more.

SEC. 161 (as amended by chapter 255, Acts of 1903). No child under the age of sixteen years shall be employed, permitted or suffered to work in or in connection with any mercantile establishment, business office, or telegraph office, restaurant, hotel, apartment house, or in the distribution or transmission of merchandise or messages, more than fifty-four hours in any one week, or more than nine hours in any one day, or before seven o'clock in the morning or after ten o'clock in the evening of any day. No female employee between sixteen and twenty-one years of age shall be required, permitted or suffered to work in or in connection with any mercantile establishment more than sixty hours in any one week; or more than ten hours in any one day, unless for the purpose of making a shorter workday of some one day of the week; or before seven o'clock in the morning or after ten o'clock in the evening of any day. This section does not apply to the employment of persons sixteen years of age or upwards on Saturday, provided the total number of hours of labor in a week of any such person does not exceed sixty hours, nor to the employment of such persons between the fifteenth day of December and the following first day of January. Not less than forty-five minutes shall be allowed for the noonday meal of the employees of any such establishment.

SEC. 162 (as amended by chapter 255, Acts of 1903). No child under the age of fourteen years shall be employed, permitted or suffered to work in or in connection with any mercantile or other establishment specified in the preceding section, except that a child upwards of twelve years of age may be employed therein in villages and cities of the third class, during the summer vacation of the public schools of the city or district where such establishment is situated. No child under the age of sixteen years shall be employed in any such establishment, unless an employment certificate issued as provided in this article, shall have been theretofore filed in the office of the employer at the place of employment of such child.

[Sections 163 to 165, inclusive, are identical with sections 71 to 73, pages 246, 247, supra.]

SEC. 166 (as amended by chapter 255, Acts of 1903). Children of the age of twelve years or more who can read and write simple sentences in the English language, may be employed, in mercantile and other establishments specified in section one hundred and sixty-one, in villages and cities of the third class during the summer vacation of the public schools in the city or school districts where such children reside upon obtaining the vacation certificate herein provided. Such certificate shall be issued in the same manner, upon the same conditions, and on like proof that such child is twelve years of age or upwards, and is in sound health, as is required for the issuance of an employment certifi-



cate under this article, except that a school record of such child shall not be required. The certificates provided for in this section shall be designated summer vacation certificates, and shall correspond in form and substance as nearly as practicable to such employment certificate, and shall in addition thereto specify the time in which the same shall remain in force and effect which in no case shall be other than the time in which the public schools where such children reside are closed for a summer vacation.

SEC. 167 (as amended by chapter 255, Acts of 1903, and chapter 493, Acts of 1905). The owner, manager, or agent of a mercantile or other establishment specified in section one hundred and sixty-one, employing children, shall keep or cause to be kept, in the office of such establishment, a register, in which shall be recorded the name, birthplace, age and place of residence of all children so employed under the age of sixteen years. Such register and the certificates filed in such office shall be produced for inspection, upon the demand of an officer of the board, department or commissioner of health of the town, village or city where such establishment is situated. On termination of the employment of the child so registered and whose certificate is so filed, such certificate shall be forthwith surrendered by the employer to the child or its parent or guardian or custodian. An officer of the board, department or commissioner of health of the town, village or city where a mercantile or other establishment mentioned in this article is situated, may make demand on an employer in whose establishment a child apparently under the age of sixteen years is employed or permitted or suffered to work, and whose employment certificate is not then filed as required by this chapter, that such employer shall either furnish him within ten days, evidence satisfactory to him that such child is in fact over sixteen years of age, or shall cease to employ or permit or suffer such child to work in such establishment. The officer may require from such employer the same evidence of age of such child as is required on the issuance of an employment certificate; and the employer furnishing such evidence shall not be required to furnish any further evidence of the age of the child. A notice embodying such demand may be served on such employer personally or may be sent by mail addressed to him at said establishment, and if served by post shall be deemed to have been served at the time when the letter containing the same would be delivered in the ordinary course of the post. When the employer is a corporation such notice may be served either personally upon an officer of such corporation, or by sending it by post addressed to the office of the principal place of business of such corporation. The papers constituting such evidence of age furnished by the employer in response to such demand shall be filed with the board, department, or commissioner of health and a material false statement made in any such paper or affidavit by any person, shall be a misdemeanor. In case such employer shall fail to produce and deliver to the officer of the board, department, or commissioner of health within ten days after such demand such evidence of age herein required by him, and shall thereafter continue to employ such child or permit or suffer such child to work in such mercantile or other establishment, proof of the giving of such notice and of such failure to produce and file such evidence shall be prima facie evidence in any prosecution brought for a violation of this article that such child is under sixteen years of age and is unlawfully employed.

SEC. 171. \* \* \* children shall not be employed or directed to work in the basement of a mercantile establishment, unless permitted by the board or department of health, or health commissioner of the town, village or city where such mercantile establishment is situated. Such permission shall be granted unless it appears that such basement is not sufficiently lighted and ventilated, and it is not in good sanitary condition.

SEC. 172 (as amended by chapter 255, Acts of 1903). The board or department of health or health commissioners of a town, village or city affected by this article shall enforce the same and prosecute all violations thereof. Proceedings to prosecute such violations must be begun within thirty days after the alleged offense was committed. All officers and members of such boards, or department, all health commissioners, inspectors, and other persons appointed or designated by such boards, departments or commissioners may visit and inspect at reasonable hours and when practicable and necessary, all mercantile or other establishments herein specified within the town, village or city for which they are appointed. No person shall interfere with or prevent any such officer from making such visitations and inspections, nor shall he be obstructed or injured by force or otherwise while in the performance of his duties. All persons connected with any such mercantile or other establishment herein specified shall properly



answer all questions asked by such officer or inspector in reference to any of the provisions of this article.

SEC. 173 (as amended by chapter 255, Acts of 1903). A copy of this article shall be posted in three conspicuous places in each establishment affected by its provisions.

SEC. 174 (added by chapter 151, Acts of 1903, amended by chapter 519, Acts of 1905). No male child under ten, and no girl under sixteen years of age shall in any city of the first or second class sell or expose or offer for sale newspapers in any street or public place.

SEC. 175 (added by chapter 151, Acts of 1903). No male child actually or apparently under fourteen years of age shall sell or expose or offer for sale said articles unless a permit and badge as hereinafter provided shall have been issued to him by the district superintendent of the board of education of the city and school district where said child resides, or by such other officer thereof as may be officially designated by such board for that purpose, on the application of the parent, guardian or other person having the custody of the child desiring such permit or badge, or in case said child has no parent, guardian or custodian then on the application of his next friend, being an adult. Such permit and badge shall not be issued until the officer issuing the same shall have received, examined, approved and placed on file in his office satisfactory proof that such male child is of the age of ten years or upwards. No permit or badge provided for herein shall be valid for any purpose except during the period in which such proof shall remain on file, nor shall such permit or badge be authority beyond the period fixed therein for its duration. After having received, examined, approved and placed on file such proof the officer shall issue to the child a permit and badge.

SEC. 176 (added by chapter 151, Acts of 1903). Such permit shall state the date and place of birth of the child, the name and address of its parent, guardian, custodian or next friend as the case may be and describe the color of hair and eyes, the height and weight and any distinguishing facial mark of such child, and shall further state that the proof required by the preceding section has been duly examined, approved and filed; and that the child named in such permit has appeared before the officer issuing the permit. The badge furnished by the officer issuing the permit shall bear on its face a number corresponding to the number of the permit, and the name of the child. Every such permit, and every such badge on its reverse side, shall be signed in the presence of the officer issuing the same by the child in whose name it is issued.

SEC. 177 (added by chapter 151, Acts of 1903, amended by chapter 519, Acts of 1905). The badge provided for herein shall be worn conspicuously at all times by such child while so working; and such permit and badge shall expire at the end of one year from the date of their issue. No child to whom such permit and badge are issued shall transfer the same to any other person nor be engaged in any city of the first or second class as a newsboy, or shall sell or expose or offer for sale newspapers in any street or public place without having upon his person such badge, and he shall exhibit the same upon demand at any time to any police, or attendance officer.

SEC. 178 (added by chapter 151, Acts of 1903). The parent, guardian, custodian or next friend, as the case may be, of every child to whom such permit and badge shall be issued shall surrender the same to the authority by which said permit and badge are issued at the expiration of the period provided therefor.

SEC. 179 (added by chapter 151, Acts of 1903). No child to whom a permit and badge are issued as provided for in the preceding sections shall sell or expose or offer for sale any newspapers after ten o'clock in the evening.

SEC. 179a (added by chapter 151, Acts of 1903, amended by chapter 519, Acts of 1905). Any child who shall work in any city of the first or second class in any street or public place as a newsboy or shall sell or expose or offer for sale newspapers under circumstances forbidden by the provisions of this article, must be arrested and brought before a court or magistrate having jurisdiction to commit a child to an incorporated charitable reformatory or other institution and be dealt with according to law; and if any such child is committed to an institution, it shall when practicable, be committed to an institution governed by persons of the same religious faith as the parents of such child.

2. Nothing in this act contained shall be deemed or construed to repeal, amend, modify, impair or in any manner affect any provision of the Penal Code or the Code of Criminal Procedure.



SEC. 209 (as amended by chapter 380, Acts of 1903). Any person who violates or does not comply with:

1. The provisions of article six [sections 70 to 92] of the labor law, relating to factories;

4. The provisions of article eleven [sections 160 to 173] of the labor law, relating to mercantile establishments, and the employment of women and children therein;

5. Any person who knowingly makes a false statement in or in relation to any application made for an employment certificate as to any matter required by articles six and eleven of the labor law to appear in any affidavit, record, transcript or certificate therein provided for, is guilty of a misdemeanor and upon conviction shall be punished for a first offense by a fine of not less than twenty nor more than one hundred dollars; for a second offense by a fine of not less than fifty nor more than two hundred dollars, or by imprisonment for not more than thirty days or by both such fine and imprisonment; for a third offense by a fine of not less than two hundred and fifty dollars, or by imprisonment for not more than sixty days, or by both such fine and imprisonment.

## NORTH CAROLINA.

### ACTS OF 1891.

#### CHAPTER 45.—*Enticing minors.*

SECTION 1. Any person who shall employ and carry beyond the limits of this State any minor, or who shall induce any minor to go beyond the limits of this State for the purposes of employment without the consent in writing, duly authenticated, of the parent, guardian or other person having authority over such minor shall be guilty of a misdemeanor, and on conviction thereof shall be fined not less than five hundred and not more than one thousand dollars for each offense.

SEC. 2. The fact of the employment and going out of the State of the minor, or of the going out of the State by the minor, at the solicitation of the person for the purpose of employment, shall be prima facie evidence of knowledge that the person employed or solicited to go beyond the limits of the State is a minor.

### ACTS OF 1893.

#### CHAPTER 309.—*Contract of employment with intent to defraud.*

SECTION 1. Whenever any person having a contract with any corporation, company or person for the manufacture or change of any raw material by the piece or pound shall hire and employ any minor to assist in said work upon the faith of and by color of said contract and with intent to cheat and defraud said minor, and shall secure the contract price and shall willfully fail to pay said minor when he shall have performed his part of said contract work, whether done by the day or by the job, the person so offending shall be guilty of a misdemeanor, and upon conviction shall be fined not more than fifty dollars or imprisoned not more than thirty days.

### ACTS OF 1897.

#### CHAPTER 251.—*Employment in mines.*

SECTION 7. \* \* \* No boy under twelve years of age shall be allowed to work in any mine, and in all cases of minors applying for work, the agent of such mine shall see that the provisions of this section are not violated; and the inspector may, when doubt exists as to the age of any minors found working in any mine, qualify and examine the said minor, or his parents as to his age. \* \* \*

SEC. 8. The provisions of this act shall not apply or effect [affect] any mine in which not more than ten men are employed at the same time; \* \* \* whosoever knowingly violates any of the provisions of this act \* \* \*, shall be guilty of a misdemeanor, and upon conviction fined not less than fifty dollars or imprisoned in the county jail not more than thirty days or both.



## ACTS OF 1903.

CHAPTER 473.—*Age limit—Hours of labor.*

SECTION 1. No child under twelve years of age shall be employed or work in any factory or manufacturing establishment within this State: *Provided*, This act shall not apply to oyster canning and packing manufactories in this State, where said canning and packing manufactories pay for opening or shucking oysters by the gallon or bushel.

SEC. 2. Not exceeding sixty-six hours shall constitute a week's work in all factories and manufacturing establishments of this State, and no person under 18 years of age shall be required to work in such factories or establishments a longer period than sixty-six hours in one week: *Provided*, That this section shall not apply to engineers, firemen, machinists, superintendents, overseers, section and yard hands, office men, watchmen or repairers of breakdowns.

SEC. 3. All parents, or persons standing in relation of parent, upon hiring their children to any factory or manufacturing establishment, shall furnish such establishment a written statement of the age of such child or children being so hired, and any such parent, or person standing in the relation of parent to such child or children, who shall in such written statement misstate the age of such child or children being so employed, shall be guilty of a misdemeanor, and upon conviction shall be punished at the discretion of the court. Any mill owner, superintendent or other person acting in behalf of a factory or manufacturing establishment who shall knowingly or willfully violate the provisions of this act shall be guilty of a misdemeanor, and upon conviction shall be punished at the discretion of the court.

## ACTS OF 1905.

CHAPTER 391.—*Employment while parents live in idleness.*

SECTION 2. All persons who may come within either of the classes hereinafter named shall be deemed a vagrant.

SEC. 3.

\* \* \* \* \*

6th. All able-bodied men who have no other visible means of support who shall live in idleness upon the wages of [or] earnings of their \* \* \* minor child or children, except male child or children over eighteen years of age.

## NORTH DAKOTA.

## CONSTITUTION.

ARTICLE 17.—*Age limit.*

SECTION 209.—The labor of children under twelve years of age shall be prohibited in mines, factories and workshops in this State.

## REVISED CODES OF 1899.

## POLITICAL CODE.

*Age limit—School attendance.*

SECTION 759. Every parent, guardian or other person having control of any child between eight and fourteen years of age, shall be required to send such child to a public school in the district, city or village in which he resides at least twelve weeks in each school year, six weeks of which shall be consecutive; \* \* \* *Provided*, That such parent, guardian or other person having control of any child shall be excused from such duty by the school board of the district or the board of education of the city or village, whenever it shall be shown to their satisfaction, subject to appeal as provided by law, that one of the following reasons therefor exists:

1. That such child is taught for the same length of time in a private school, approved by such board; but no school shall be approved by such board unless the branches usually taught in the public schools are taught in such school.



2. That such child has already acquired the branches of learning taught in the public schools.

3. That such child is in such a physical or mental condition (as declared by the county physician if required by the board), as to render such attendance inexpedient or impracticable. If no school is taught the requisite length of time within two and one-half miles of the residence of such child by the nearest route, such attendance will not be enforced. \* \* \*

SEC. 762. No child between eight and fourteen years of age shall be employed in any mine, factory or workshop or mercantile establishment, or, except by his parents or guardian, in any other manner, during the hours when the public schools in the city, village or district are in session, unless the person employing him shall first procure a certificate from the superintendent of schools of the city or village, if one is employed, otherwise from the clerk of the school board or board of education, stating that such child has attended school for the period of twelve weeks during the year, as required by law, or has been excused from attendance as provided in section 759; and it shall be the duty of such superintendent or clerk to furnish such certificate upon application of the parent, guardian or other persons having control of such child, entitled to the same.

SEC. 763. Each owner, superintendent or overseer of any mine, factory, workshop or mercantile establishment, and any other person who shall employ any child between eight and fourteen years of age contrary to the provisions of this article, is guilty of a misdemeanor, and upon conviction thereof shall be fined for each offense in a sum not less than twenty nor more than fifty dollars and costs. Each person authorized to sign a certificate as prescribed in the preceding section, who certifies to any materially false statement therein, shall be fined not less than twenty nor more than fifty dollars and costs.

#### CIVIL CODE.

##### *Earnings of minors.*

SECTION 2793. The wages of a minor employed in service may be paid to him or her until the parent or guardian entitled thereto gives the employer notice that he claims such wages.

#### PENAL CODE.

##### *Hours of labor.*

SECTION 7666. Every owner, stockholder, overseer, employer, clerk or foreman, of any manufactory, workshop or other place used for mechanical or manufacturing purposes, who, having control, shall compel \* \* \* any child under eighteen years of age, or permit any child under fourteen years of age, to labor in any day exceeding ten hours, shall be deemed guilty of a misdemeanor, and upon conviction, shall be punished by fine not exceeding one hundred and not less than ten dollars.

#### OHIO.

##### BATES' ANNOTATED STATUTES—THIRD EDITION.

#### PART I.—POLITICAL.

##### *Employment in mines.*

SECTION 302. No child under fifteen years of age shall be allowed to work in any mine, during the school term of the public schools in the district in which such minor resides, and no child under fourteen years of age shall be employed in any mine during the vacation interim of the public schools in the school district in which such minor resides, and in all cases of minors applying for work the agent of such mine shall see that the provisions of this section are not violated; he shall also keep a record of all minors employed by him, or by any person employed in said mines, giving the name, age, place of birth, parents' name and residence, with character of employment, and he shall demand from such minor proof that he has complied with the requirements of the school laws; and it shall be the duty of the mine inspector to inspect such record and to report to the chief inspector of mines the number of minors employed in or about such mines and to enforce the provisions of this section.



SEC. 303. In case any coal mine does not, in appliances for the safety of the persons working therein, conform to the provisions of this chapter, or the owner or agent disregards the requirements of this chapter, any court of competent jurisdiction may, on application of the inspector, by civil action, in the name of the State, enjoin or restrain the owner or agent from working or operating such mine, until it is made to conform to the provisions of this chapter; and such remedy shall be cumulative, and shall not take the place of or affect any other proceedings against such owner or agent authorized by law for the matter complained of in such action.

*Employment in elevators.*

SECTION 2575-91. No person under twenty-one years of age shall be employed in running or operating any electric, steam or hydraulic passenger or freight elevators, and it shall be unlawful for any firm, company or person in the State of Ohio, owning, operating or having in charge any such passenger or freight elevator or elevators to employ a person under twenty-one years of age to run or operate any such elevator.

SEC. 2575-92. Any person, firm or corporation, or any agent, trustee, director, officer or employee of any person, firm or corporation, who shall employ any person contrary to the provisions of the foregoing section, or who shall violate any of its provisions, shall, upon conviction thereof, be fined in any sum not less than twenty-five nor more than one hundred dollars, or imprisonment not less than thirty nor more than sixty days.

PART II.—CIVIL.

*Employment during school term—Illiterates.*

SECTION 4022-1 (as amended by act, page 615, Acts of 1902). All parents, guardians and other persons who have care of children, shall instruct them, or cause them to be instructed in reading, spelling, writing, English grammar, geography and arithmetic. Every parent, guardian or other person having charge of any child between the ages of eight and fourteen years shall send such child to a public, private or parochial school, for the full time that the school attended is in session, which shall in no case be for less than twenty-four weeks, and said attendance shall begin within the first week of the school term, unless the child is excused from such attendance by the superintendent of the public schools, in city or other districts having such superintendent, or by the clerk of the board of education in village, special and township districts not having such superintendent, or by the principal of the private or parochial school, upon satisfactory showing, either that the bodily or mental condition of the child does not permit of its attendance at school, or that the child is being instructed at home by a person qualified \* \* \* to teach the branches named in this section. \* \* \*

SEC. 4022-2 (as amended by act, page 615, Acts of 1902, and act, page 334, Acts of 1904). No child under sixteen years of age shall be employed or be in the employment of any person, company or corporation during the school term and while the public schools are in session, unless such child shall present to such person, company or corporation an age and schooling certificate herein provided for. An age and schooling certificate shall be approved only by the superintendent of schools, or by a person authorized by him, in city or other districts having such superintendent, or by the clerk of the board of education in village, special and township districts not having such superintendent, upon a satisfactory proof of the age of such minor and that he has successfully completed the studies enumerated in section 4022-1 of the Revised Statutes of Ohio; or if between the ages of fourteen and sixteen years, a knowledge of his or her ability to read and write legibly the English language. The age and schooling certificate shall be formulated by the State commissioner of common schools and the same furnished, in blank, by the clerk of the board of education. Every person, company or corporation employing any child under sixteen years of age, shall exact the age and schooling certificate prescribed in this section, as a condition of employment and shall keep the same on file, and shall upon request of the truant officer herein provided for, permit him to examine such age and schooling certificate. Any person, company or corporation, employing any minor contrary to the provisions of this section shall be fined not less than twenty-five nor more than fifty dollars.



SEC. 4022-3 (as amended by act, page 615, Acts of 1902). All minors over the age of fourteen and under the age of sixteen years, who can not read and write the English language shall be required to attend school as provided in section 4022-1 of the Revised Statutes of Ohio and all the provisions of said section shall apply to said minors: *Provided*, That such attendance shall not be required of such minors after they have secured a certificate from the superintendent of schools, in districts having superintendents or the clerk of the board of education in districts not having superintendents, that they can read and write the English language. No person, company or corporation shall employ any such minor during the time schools are in session, or having such minor in their employ shall immediately cease such employment, upon notice from the truant officer who is hereinafter provided for. Every person, company or corporation violating the provisions of this section shall be fined not less than twenty-five nor more than fifty dollars.

SEC. 4022-9 (as amended by act, page 615, Acts of 1902). When any truant officer is satisfied that any child, compelled to attend school by the provisions of this act, is unable to attend school because absolutely required to work, at home or elsewhere, in order to support itself or help support or care for others legally entitled to its services, who are unable to support or care for themselves, the truant officer shall report the case to the authorities charged with the relief of the poor, and it shall be the duty of said officers to afford such relief as will enable the child to attend school the time each year required under this act. Such child shall not be considered or declared a pauper by reason of the acceptance of the relief herein provided for. \* \* \* In all cases where relief is necessary it shall be the duty of the board of education to furnish text books free of charge and said board may furnish any further relief it may deem necessary, the expenses incident to furnishing said books and relief to be paid from the contingent funds of the school district.

*Retaining wages—Written contracts.*

SECTION 4364-65. It shall be unlawful for any person, company or corporation doing business in the State of Ohio, to retain or withhold from an employee, male or female, who is a minor, the wages or compensation, or any part thereof, agreed to be paid to such employee, and due to the same for work performed or services rendered, because of presumed negligence or failure to comply with rules, or for breakage of machinery, or for alleged incompetency to produce work or to perform labor in accordance with any standard of merit set up; nor shall any firm, corporation, or individual as aforesaid, receive any guarantee, bonus, or money deposit, or any other form of security, in order to obtain or to secure for any such minor employment, or to insure faithful performance of labor, or to guarantee strict observance of rules, or to make good any losses which may be ascribed or charged to the incompetence, negligence, or inability of such minor employee.

SEC. 4364-66 (as amended by act, page 598, Acts of 1902). No person, company or corporation, as aforesaid, shall give employment to any minor, without agreeing with said minor what wages or compensation he or she shall be entitled to receive per day, week, month or year or per piece for work performed; and written evidence of such agreement shall be furnished to such minor, and on or before each pay day a statement of earnings due, and the amount thereof to be paid to him or her on such pay day shall be given to such minor, and no subsequent change shall be made in the wages or compensation of such minor without notice of the same being given to him or her at least twenty-four hours previous to its going into effect, and when such change is effected written agreement shall be given as in the first instance to said minor employee.

SEC. 4364-67. Any person, or officer, or agent of any company or corporation, who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof in any court of competent jurisdiction, be fined in any sum not exceeding two hundred dollars, or imprisonment in the county jail for a period not exceeding six months, or both, at the discretion of the court; and it is hereby declared to be the duty of the State inspector of workshops and factories to see that the provisions of this act shall be enforced.



## PART IV.—PENAL.

*Certain employments forbidden.*

SECTION 6984. Whoever takes, receives, hires, employs, uses, exhibits, or in any manner, or under any pretense, sells, apprentices, gives away, lets out, or otherwise disposes of, to any person, any child under the age of fourteen years, for or in the vocation, occupation, service, or purpose of singing, playing on musical instruments, rope or wire walking, dancing, begging, or peddling, or as a gymnast, contortionist, rider, or acrobat, or for or in any obscene, indecent, or immoral purpose, exhibition, or practice, or for or in any business, exhibition, or vocation injurious to the health or dangerous to the life or limbs of such child, or causes, or procures, or encourages, any such child to engage therein, or causes or permits any such child to suffer, or inflicts upon it, unjustifiable physical pain or mental suffering, or willfully causes or permits the life of any such child to be endangered, or its health to be injured, or such child to be placed in such situation that its life may be endangered, or its health injured, or has in custody any such child for any of the purposes aforesaid, shall be fined not more than two hundred dollars, or imprisoned not more than six months, or both.

SEC. 6986-1. No child under the age of sixteen years, shall be employed by any person, firm or corporation in this State, at employment whereby its life or limb is endangered, or its health is likely to be injured, or its morals may be depraved by such employment.

SEC. 6986-2. Any person, firm or corporation in this State who willfully causes or permits the life or limb of any child under the age of sixteen years to be endangered, or its health to be injured, or its morals to become depraved, from and while actually in their employ, or who willfully permits such child to be placed in such a position or to engage in such employment that its life or limb is in danger, or its health likely to be injured, or its morals likely to be impaired by such position or employment, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than ten (\$10) dollars nor more than fifty (\$50) dollars, or imprisonment not less than thirty nor more than ninety days for each and every offense.

SEC. 6986-3. It shall be the duty of the State inspector of workshops and factories to enforce the provisions of this act.

*Age limit—Night work—Hours of labor—Time for meals.*

SECTION 6986-7 (as amended by act, page 598, Acts of 1902, and act, page 321, Acts of 1904). No child under the age of fourteen years shall be employed in any factory, workshop, mercantile or other establishment, directly or indirectly at any time, nor be employed as messenger or driver therefor; and no child under [said] the age shall be employed in any other manner, whether it be for compensation or otherwise, when the public schools in which district such child resides are in session.

Every person, company or corporation, or agent having charge of or the management of such factory, workshop, mercantile or other establishment employing any child over fourteen years and under sixteen years of age, shall exact the age and schooling certificate prescribed in section 4022-2 as a condition of employment, and shall keep the same on file, and shall upon the request of the chief or district inspector of workshops and factories produce said certificates for inspection; but no person authorized as aforesaid shall approve such certificates for any child under sixteen years of age then in or about to enter his own employment or the employment of a firm, company or corporation of which he is a member, officer, or employee. An age and schooling certificate shall not be approved unless satisfactory evidence is furnished by the last school census, the certificate of birth or baptism, or in some such manner, that said child is of the age required as aforesaid; failure to produce to an inspector of workshops and factories an age and schooling certificate, as aforesaid required, shall be prima facie evidence of the illegal employment of any person whose age and schooling certificate is not produced.

In case of doubt of the physical fitness of such minor, the inspector shall require a certificate signed by a medical officer of the board of health, certifying that such child is in sound health and physically able to perform the work he is required to do.



SEC. 6986-8 (as amended by act, page 598, Acts of 1902, and act, page 321, Acts of 1904). It shall be the duty of every person employing minors under the age of eighteen years to keep a register in which shall be recorded the name, birthplace, age and place of residence of every minor employed by him under the age of eighteen years. No boy under sixteen years of age and no girl under eighteen years of age, shall be employed at any work at night time later than seven o'clock in the evening nor earlier than six o'clock in the morning, and no minor under eighteen years of age shall be employed in any of the places named in section 6986-7 of the Revised Statutes of Ohio for a longer period than ten hours in one day, nor more than fifty-five hours in one week; and every such minor under eighteen years of age shall be entitled to no less than thirty minutes for meal time at noon, but such meal time shall not be included as part of the work hours of the day; and every employer shall post in a conspicuous place in every room where such minors are employed a printed notice stating the maximum number of work hours required in one week, and in each day of the week from such minors; such printed notice to be furnished by the chief inspector of workshops and factories, and approved by the attorney-general.

SEC. 6986-9 (as amended by act, page 321, Acts of 1904). Any person, firm or corporation who shall employ any minor contrary to the provisions of this act, or who shall violate any of the provisions thereof, shall, upon conviction, be fined in any sum not less than ten dollars nor more than fifty dollars, and upon failure or refusal of any such person, firm or corporation to pay said fine or costs according to the order of the court, then such person, firm or corporation shall be imprisoned in the county jail until such fine is paid.

### OKLAHOMA.

#### STATUTES OF 1893.

##### *Hours of labor.*

PARAGRAPH 2550. Every owner, stockholder, overseer, employer, clerk or foreman, of any manufactory, workshop, or other place used for mechanical or manufacturing purposes, who, having control, shall compel \* \* \* any child under eighteen years of age, or permit any child under fourteen years of age, to labor in any day exceeding ten hours, shall be deemed guilty of a misdemeanor, and upon conviction, shall be punished by fine not exceeding one hundred and not less than ten dollars.

##### *Earnings of minors.*

PARAGRAPH 3562. The wages of a minor employed in service may be paid to him or her until the parent or guardian entitled thereto gives the employer notice that he claims such wages.

### ORÉGON.

#### ACTS OF 1903.

##### *Age limit—Employment during school hours—Night work—Lunch time—Illiterates.*

(Act, page 79, as amended by chapter 208, Acts of 1905.)

SECTION 2. No child under fourteen years of age shall be employed in any factory, store, workshop, in or about any mine, or in the telegraph, telephone, or public messenger service.

SEC. 3. No child under the age of fourteen years shall be employed in any work, or labor of any form, for wages or other compensation to whomsoever payable, during the hours when the public schools of the town, district, or city in which he or she resides are in session.

SEC. 4. Attendance at school shall be compulsory upon all children between the ages of eight and fourteen years in all cities, towns and villages of the State of Oregon during the whole of the school term in the city, town or village in which the child resides, and upon all children in such city, towns, and villages between the ages of fourteen and sixteen years who are not employed in some lawful work.



SEC. 5. No child under sixteen years of age shall be employed at any work before the hour of seven in the morning, or after the hour of six at night, nor employed for longer than ten hours for any one day, nor more than six days in any one week; and every such child, under sixteen years of age, shall be entitled to not less than thirty minutes for meal time at noon, but such meal time shall not be included as part of the work hours of the day; and every employer shall post in a conspicuous place where such minors are employed, a printed notice stating the maximum work hours required in one week, and in every day of the week, from such minors.

SEC. 6. No child under sixteen years of age shall be employed, permitted or suffered to work in any employment enumerated in section 2 unless the person or corporation employing him procures and keeps on file and accessible to the school authorities of the district where such child resides, and to the police and board of inspectors of child labor an age and schooling certificate as hereinafter prescribed, and keep a complete list of all such children employed therein.

SEC. 7. An age and schooling certificate shall be executed, issued and approved only by the superintendent of schools, or by a person authorized by him in writing or, where there is no superintendent of schools, by a person authorized by the board of school directors: *Provided*, That no member of a board of school directors or other person authorized as aforesaid shall have authority to approve such certificate for any child then in or about to enter his own employment, or the employment of a firm or corporation of which he is a member, officer or employee. The person approving the certificate shall have authority to administer the oath provided for therein, but no fees shall be charged therefor.

SEC. 8. An age and schooling certificate shall not be approved unless satisfactory evidence is furnished by the last school census, the duly attested transcript of the certificate of birth or baptism of such child or other religious record, or the register of birth of such child with a town or city clerk, that such child is of the age stated in the certificate.

SEC. 9. The age and schooling certificate of a child under sixteen years of age shall not be executed, approved and signed until he presents to the person authorized to execute, approve and sign the same an employment ticket issued by the board of child labor inspectors duly filled out and signed as hereinafter prescribed. A duplicate of each age and schooling certificate shall be filled out and kept on file by the board of school directors. Any explanatory matter may be printed with such certificate, in the discretion of the board of school directors or superintendent of schools. The employment ticket and the age and schooling certificate shall be separately printed, and shall be filled out, signed, and held or surrendered, as indicated in the following form:

#### EMPLOYMENT TICKET.

When (name of child) ——— height, (feet and inches) ———, eyes, (color) ———, complexion, (fair or dark,) hair, (color) ———, presents an age and schooling certificate duly signed, I intend to employ (him or her) at ——— (nature of occupation.)

(Signature of intending employer or agent.)

(Town or city and date.)

#### AGE AND SCHOOLING CERTIFICATE.

This certifies that I am the (father, mother, guardian, or custodian) of (name of child) ———, and that (he or she) was born at (name of town or city) ——— in the county of (name of county, if known) and State (or country) of ——— on the (day and year of birth) ——— and is now (number of years and months) ——— old.

(Signature of father, mother, guardian, or custodian.)

(Town or city and date.)

Then personally appeared before me the above named (name of person signing) ——— and made oath that the foregoing certificate by (him or her) signed is true to the best of (his or her) knowledge and belief. I hereby approve the foregoing certificate of (name of child) ———, height, (feet and inches) ———, eyes, (color) ———, complexion, (clear or dark,) hair, (color,) having no sufficient reason to doubt that (he or she) is of the age therein certified. I hereby certify that (he or she) can read at sight and (can or can not) write legibly simple sentences in the English language, and that (he or she) has reached the normal development of a child of (his or her) age,



and is in sound health and is physically able to perform the work which (he or she) intends to do, and that (he or she) has regularly attended the public schools or a school equivalent thereto, for not less than 160 days during the school year previous to arriving at the age of fourteen years, or during the year previous to applying for such school record, and has received during such period instruction in reading, spelling, writing, English grammar, and geography, and is familiar with the fundamental operations of arithmetic to and including fractions.

This certificate belongs to (name of child in whose behalf it is drawn) \_\_\_\_\_ and is to be surrendered (to him or her) whenever (he or she) leaves the service of the corporation or employer holding the same; but if not claimed by said child within thirty days from such time it shall be returned to the superintendent of schools, or, where there is no superintendent of schools, to the school committee.

(Signature of person authorized to approve and sign, with official character or authority.)

(Town or city and date.)

SEC. 10. A failure to produce to the school authorities of the district where such child resides and to the police and to the board of inspectors of child labor any age and schooling certificate or list required by this act shall be prima facie evidence of the illegal employment of any person whose age and schooling certificate is not produced or whose name is not so listed. Any corporation or employer retaining any age and schooling certificate in violation of section 5 of this act shall be fined ten dollars. Every person authorized to sign the certificate prescribed by section 5 of this act who knowingly certifies to any materially false statement therein shall be guilty of a misdemeanor and upon conviction thereof shall be fined not less than five dollars and not more than fifty dollars.

The board of inspectors of child labor or any one or more of them or anyone authorized by such board in writing may visit the factories, workshops, and mercantile establishments in their several towns and cities and ascertain whether any minors are employed therein contrary to the provisions of this act, and they shall report any cases of such illegal employment to the proper school authorities and to the district attorney of the county. The board of inspectors of child labor may require that the age and schooling certificates and lists provided for [by] this act, of minors employed in such factories, workshops, or mercantile establishments, shall be produced for their inspection. Complaints for offenses under this act shall be brought by the board of inspectors of child labor to the attention of the proper district attorney and offenses hereunder shall be prosecuted by such district attorney.

SEC. 11. Any person or corporation who shall employ a minor contrary to the provisions of this act, or who shall violate any of the provisions thereof, shall be guilty of a misdemeanor and upon conviction shall be fined in a sum not less [than] \$10 nor more than \$25 for the first offense, nor less than \$25 nor more than \$50 for the second offense, and be imprisoned for not less than ten nor more than thirty days for the third and each succeeding offense.

SEC. 12. Any parent or guardian who shall violate any of the provisions of this act or allow any child under their custody or control to be employed contrary to the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof shall [be] fined not less than five dollars and not more than twenty-five dollars.

SEC. 13. The board of inspectors of child labor may in its discretion allow children between the ages of twelve and fourteen to be employed in any suitable work during any school vacation extending over a term of two weeks and may issue permits therefor. It shall be the duty of such board to exercise careful discretion as to the character of such employment and its effect on the physical and moral well-being of the child.

SEC. 14. The board of inspectors of child labor of the State of Oregon, heretofore appointed such board under the provisions of the act of which this is amendatory, are hereby appointed a board of inspectors of child labor of the State of Oregon, and shall serve without compensation. The term for which such inspectors shall serve shall be one, two, three, four, and five years, respectively, from the time of their original appointment, the terms to remain as already determined by lot under said original act, and upon the expiration of the term of any one of said inspectors the governor shall appoint his or her successor to serve for a term of five years. Appointments shall be so made that three at least of said inspectors shall always be women.



## PENNSYLVANIA.

## BRIGHTLY'S PURDON'S DIGEST, TWELFTH EDITION—1895.

*Certain employments forbidden—Employment on elevators—Employment in mines.*

(Page 1015.)

SECTION 9. Any person having the care, custody or control, lawful or unlawful, for [of] any minor child under the age of eighteen years, who shall use such minor or apprentice, give away, let out, hire or otherwise dispose of such minor, to any person, for the purpose of singing, playing on musical instruments, begging, or for any mendicant business whatsoever, in the streets, roads or other highways of this Commonwealth, and whosoever shall take, receive, hire, employ, use or have in custody, any such minor, for the vocation, occupation, calling, service or purpose of singing, playing upon musical instruments or begging, upon the street, roads or other highways of the Commonwealth, or for any mendicant business whatever, shall be guilty of a misdemeanor, and upon conviction thereof in the manner provided in the first section of this act, shall be fined not less than fifty dollars nor more than one hundred dollars.

SEC. 10. Any person having the care, custody or control of any minor child under the age of fifteen years, who shall in any manner sell, apprentice, give away or permit such child to sing, dance, act, or in any manner exhibit, in any dance house whatever, or in any concert saloon, theater or place of entertainment, where wines or spirituous or malt liquors are sold or given away, or with which any place for the sale of wines or spirituous or malt liquors is directly or indirectly connected, by any passageway or entrance, and any proprietor of any dance house whatever, or any such concert saloon, theater or place of entertainment, so employing any such child, shall be guilty of a misdemeanor, and upon conviction thereof in the manner provided in the first section of this act, shall be fined not less than fifty dollars nor more than one hundred dollars for each offense.

SEC. 11. Any person having the care, custody or control of any minor child under the age of fifteen years, who shall in any manner sell, apprentice, give away or otherwise dispose of such child, and any person who shall take, receive or employ such child for the vocation or occupation of rope or wire walking, or as an acrobat, gymnast, contortionist or rider, and any person who, having the care, custody or control of any minor child whatsoever, shall sell, apprentice, give away or otherwise dispose of such child, or who shall take, receive or employ such child, for any obscene, indecent or illegal exhibition or vocation, or any vocation injurious to the health or dangerous to the life or limb of such child engaged therein, or for the purpose of prostitution, and any person who shall retain, harbor or employ any minor child in or about any assignation house or brothel, or in any place where any obscene, indecent or illegal exhibition takes place, shall be guilty of a misdemeanor, and upon conviction thereof before any justice of the peace, magistrate or court of record, shall be fined not less than fifty dollars nor more than one hundred dollars for each offense.

SEC. 12. No person, firm or corporation shall employ or permit any minor under the age of fourteen years to have the care, custody, management or operation of any elevator. Any person, firm or corporation, employing any minor under the age of fourteen years to operate, manage or otherwise have the care or custody of an elevator, shall be guilty of a misdemeanor, and upon conviction thereof, shall be sentenced to pay a fine of not less than twenty-five dollars nor more than one hundred dollars.

SEC. 14 (as amended by act No. 266, Acts of 1903). No boy under the age of sixteen years, and no woman or girl of any age, shall be employed or permitted to be in any mine for the purpose of employment therein; nor shall a boy under the age of fourteen years or a woman or girl of any age, be employed or permitted to be in or about the outside structures or workings of a colliery for the purpose of employment; but it is provided, however, that this prohibition shall not affect the employment of a boy or female, of suitable age, in an office or in the performance of clerical work at a colliery.

SEC. 15. When an employer is in doubt as to the age of any boy or youth applying for employment in or about a mine or colliery, he shall demand and receive proof of the said lawful employment age of such boy or youth, by certificate from the parent or guardian, before said boy or youth shall be employed.



SEC. 16. If any person or persons contravene or fail to comply with the provisions of this act [sections 14 to 16] in respect to the employment of boys, young male persons or females, or if he or they shall connive with or permit others to contravene or fail to comply with said provisions, or if a parent or guardian of a boy or young male person make or give a false certificate of the age of such boy or young male person, or knowingly do or perform any other act for the purpose of securing employment for a boy or young male person under the lawful employment age and in contravention of the provisions of this act, he or they shall be guilty of an offense against this act.

*Employment about mine machinery.*

(Page 1349.)

SECTION 86. A sober and competent person, not under eighteen (18) years of age, shall be engaged to run the breaker engine, and he shall attend to said engine while the machinery is in motion.

SEC. 88. No person under fifteen (15) years of age shall be appointed to oil the machinery, and no person shall oil dangerous parts of such machinery while it is in motion.

SEC. 155. An engineer placed in charge of an engine whereby persons are hoisted or lowered in any mine shall be a sober and competent person of not less than twenty-one (21) years of age.

BRIGHTLY'S DIGEST—1893-1903.

*Employment in bakeries.*

(Page 62.)

SECTION 1. \* \* \* No person under the age of eighteen (18) years shall be employed in any bakehouse between the hours of nine (9) o'clock at night and five (5) in the morning. Excepted from this rule shall be the time on Sunday for setting the sponges for the night's work following.

SEC. 13. No minor male or female \* \* \* shall be employed at labor or detained in any biscuit, bread, pie or cake bakery, pretzel or macaroni establishment, for a longer period than twelve hours in any one day, nor for a longer period than sixty hours in any one week.

SEC. 23. Any person who violates any of the provisions of this act, \* \* \* shall be guilty of a misdemeanor, and on conviction before any justice of the peace, magistrate, alderman, mayor or burgess, shall be punished by a fine of not less than twenty nor more than fifty (\$50) dollars, for a first offense; and not less than fifty (\$50) [dollars] nor more than one hundred (\$100) dollars, for a second offense, or imprisonment for not more than ten (10) days; and for a third offense, by a fine of not less than two hundred and fifty (\$250) dollars and [not] more than thirty (30) days imprisonment.

*Names of children employed.*

(Page 143.)

SECTION 128. \* \* \* Any person employing a child or children shall furnish, on or before the third Monday of the school term and quarterly thereafter, to the superintendent of schools, to the secretary of the board of school directors or controllers of the district in which such child or children reside, the names, age, place of residence, and name of parent or guardian of every person under the age of sixteen years in his employ at the time of said report: \* \* \*

*Hours of labor—Age limit—Illiterates.*

(Page 254.)

SECTION 1. No minor male or female \* \* \* shall be employed at labor or detained in any manufacturing establishment, mercantile industry, laundry, workshop, renovating works or printing office, for a longer period than twelve hours in any day, nor for a longer period than sixty hours in any week.

SEC. 2. No child under thirteen years of age shall be employed in any factory, manufacturing or mercantile industry, laundry, workshop, renovating works, or printing office within this State.



SEC. 3. It shall be unlawful for any factory, manufacturing or mercantile industry, laundry, workshop, renovating works, or printing office to hire or employ any child between the age of thirteen and sixteen years, without there is first provided and placed on file an affidavit made by the parent or guardian stating the age, date and place of birth of said child. If said child have no parent or guardian, then such affidavit shall be made by the child, which affidavit shall be kept on file by the employer, and shall be returned to the child when employment ceases.

SEC. 4. All persons authorized to administer oaths must examine all children as to their ability to read and write the English language. After a careful examination, if a child is found unable to read and write the English language, or has not attended school as required by law, or is under thirteen years of age, it will be unlawful to issue a certificate; and in no case shall the officer who executes certificates charge more than twenty-five cents for administering the oath and issuing the certificate.

SEC. 5. Every person, firm or corporation, employing men, women or children, or either, in any factory, manufacturing or mercantile industry, laundry, workshop, renovating works, or printing office, shall post and keep posted, in a conspicuous place in every room where such help is employed, a printed notice, stating the number of hours per day for each day of the week required of such persons; and, in every room where children under sixteen years of age are employed, a list of their names with their age.

SEC. 8. \* \* \* no minor under sixteen years of age shall be allowed to clean machinery while in motion. And no minor, under fourteen years of age, shall operate or otherwise have the care or custody of an elevator.

SEC. 21. Any person who violates any of the provisions of this act, or who suffers any child or female to be employed in violation of its provisions, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by fine of not more than five hundred dollars. In all such cases the hearing shall be conducted by the alderman or justice of the peace before whom information is lodged, and, after full hearing of parties in interest, the alderman or justice of the peace shall impose the fine herein provided, which shall be final unless an appeal be taken to the court of quarter sessions within twenty days from the date of the imposition of the fine, as herein provided.

*Employment as steam engineers.*

(Page 535.)

SECTION 165. It shall be unlawful for any person or persons to have charge of or to operate a steam boiler or steam engine over ten horsepower, in cities of the first class of this Commonwealth, except locomotive boilers used in transportation, and steam engines and steam boilers carrying less than fifteen pounds pressure per square inch, unless said person or persons are upwards of twenty-one years of age \* \* \*

ACTS OF 1905.

Act No. 222.—*Employment in mines.* (a)

SECTION 1. It shall be unlawful for any person, firm, copartnership or corporation to employ any minor child, under the age of sixteen years, inside of any anthracite coal mine, or to employ any minor child, under the age of fourteen years, in any anthracite coal breaker or colliery, or around the outside workings of any anthracite coal mine.

SEC. 2. It shall be the duty of the chief of the department of mines of this Commonwealth, and the right of any citizen of this Commonwealth, in the name of the Commonwealth of Pennsylvania, upon any violation of the provisions of section one of this act, to bring suit in the court of common pleas of the county wherein said offense or violation occurred; and if, upon the trial of the case, the jury shall find that such violation did occur, they shall render a verdict against the offending party or parties, to an amount equal to ten dollars for each and every day said minor child or children were employed contrary to

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<sup>a</sup> This act, except sections one, two, and fourteen, was declared unconstitutional by the court of common pleas of Luzerne County, and is at the date of this publication before the superior court of the State on appeal.



the provisions of this act; said amounts, when collected, to be paid into the State treasury, for the use of the Commonwealth; and the State treasurer shall return one-half of the fine or fines so collected to the school district in which the child, so illegally employed, resided.

SEC. 3. It shall be unlawful for any person, firm, copartnership or corporation to employ any minor child in or about any anthracite coal mine or colliery, or to permit any such minor child to work in or around any anthracite coal mine or colliery, unless the person, firm, copartnership or corporation, employing said child or permitting said minor child to work, is furnished with and keeps on file an employment certificate, as hereinafter prescribed, and maintains a complete list of such children employed. Such lists and employment certificates, at all times during the employment of such minor children, shall be subject to the inspection of any common school superintendent, any truant or attendance officer of any school district, the chief of the department of mines of this Commonwealth, or any mine inspector, and shall be returned to each child when his or her employment shall cease.

SEC. 4. It shall be the duty of the city, borough or township common school superintendents within their various jurisdictions, and of the principal teacher, where no common school superintendent has jurisdiction, or their duly authorized deputies, to issue the employment certificates provided for in this act; but no principal teacher shall be authorized to issue said employment certificates within any district under a duly authorized common school superintendent. The district of such city, borough or township superintendent or principal teacher shall be the same as that in which the child seeking an employment certificate resides. Said employment certificate shall only be issued after the affidavits and documents hereinafter prescribed have received careful consideration by said common school superintendent or principal teacher, as the case may be, or their duly authorized deputies, as aforesaid; and no fee or emolument shall be charged for issuing the same.

SEC. 5. An affidavit, in duplicate, as to the age of any child under sixteen years seeking an employment certificate, shall be made by the father, mother, guardian or custodian of the child; and shall set forth the place and date of his or her birth, and the date and place of his or her baptism or circumcision, if any; shall be accompanied by a certificate of the registration of birth, baptism or circumcision of such child, as kept by any religious [religious] denomination; or by a certificate of the registration of his or her birth, as kept by any public authority, or, in the case of a foreign-born child, a true copy of passenger manifest, passport or other official record, filed at the office of the commissioner of immigration, at the port of arrival.

SEC. 6. The employment certificate required by the third section of this act, shall consist of the affidavit as to age, made before the city, borough or township common school superintendent, or principal teacher, as aforesaid, or their duly authorized deputies; and the other certificate, as herein provided, together with the certificate of approval by the said common school superintendent or principal teacher, as the case may be, or their duly authorized deputies, as hereinbefore provided, and shall be called employment certificate number one, and shall be in form following:

#### EMPLOYMENT CERTIFICATE, NUMBER 1.

COMMONWEALTH OF PENNSYLVANIA, } ss.  
COUNTY OF \_\_\_\_\_

##### 1. Affidavit of parent, guardian or custodian.

\_\_\_\_\_ being duly sworn (or affirmed) according to law, deposes and says: I am the (father, mother, guardian or custodian) of (name of child), and that to the best of my knowledge and belief (he or she) was born at (name of village, township, town or city) in the State (or country) of \_\_\_\_\_, on the (here state day, month and year of birth), and is now (state years and months of age), and that (he or she) was baptised (or circumcised) in the (state name of church) at (name of place), in the State (or country) of \_\_\_\_\_ on the (state day, month and year of baptism or circumcision).

(Signature of person making oath).

##### 2. Examination and approval of affidavit and certificates.

Personally appeared before me the above named (name of person signing), this \_\_\_\_\_ day of \_\_\_\_\_, Anno Domini one thousand nine hundred \_\_\_\_\_, at (town or city), and made oath that the aforesaid affidavit signed by (him or



her) is true, to the best of (his or her) knowledge and belief. I hereby approve the foregoing affidavit as to age of (name of child); height, (feet and inches); eyes, (color); complexion, (dark or fair); hair, (color). I hereby certify that I have examined the affidavits of (parent, guardian or custodian), the certificate of religious record of birth, baptism or circumcision, the certificate of public registration of birth, the passport, or other official immigration record (strike out the alternative certificates not presented); and find that these certificates or certificate agree in every particular with the statements of the affidavit. These certificates or certificate furnish proof that (he or she) is now — years of age. I further certify, that (he or she) can read at sight, and write legibly simple sentences in the English language, has complied with the education laws of this Commonwealth now in force, and may be employed at such times and in such employments as the laws of this Commonwealth permit such children to be employed.

This certificate belongs to (name of child), and is to be surrendered to (him or her) when (he or she) leaves the service of the corporation, firm, copartnership, or person employing the same and holding this certificate, and if not claimed by such child within thirty days from such time shall be returned to the said common school superintendent or principal teacher, as the case may be.

(Signature of person authorized to approve and sign, with official character and authority.)

*Provided*, That where no certificate of registration of birth, baptism or circumcision of such child is obtainable, or, in case of a foreign-born child, no copy of passenger manifest, passport or other official record of the child's age is obtainable, such certificate or copy may be substituted by an affidavit, by the father, mother, guardian or custodian of such child, setting forth his or her age, and date and place of his or her birth; which affidavit shall be accompanied by a statement of the principal teacher of the last school which said child attended, certifying that such child has received instruction in reading, spelling, writing, English grammar, and geography, and is familiar with the fundamental operations of arithmetic, to and including fractions; in which case the employment certificate shall be called employment certificate number two, and shall be in form following:

#### EMPLOYMENT CERTIFICATE, NUMBER 2.

COMMONWEALTH OF PENNSYLVANIA, } ss.  
COUNTY OF ———.

##### 1. Affidavit of parent, guardian or custodian.

——— being duly sworn (or affirmed) according to law, deposes and says: I am the (father, mother, guardian or custodian) of (name of child), and that, to the best of my knowledge and belief (he or she) was born at (name village, township, town or city), in the State (or country) of ——— on the (here state day, month and year of birth), and is now (state years and months of age), and that (he or she) was baptised (or circumcised) in the (state name of church) at (name of place), in the State (or country) of ———, on the (state day, month and year of baptism or circumcision).

(Signature of person making oath).

##### 2. Examination of affidavit and school record.

Personally appeared before me the above named (name of person signing), this — day of ———, Anno Domini [one thousand] nine hundred ———, at (town or city), and made oath that the aforesaid affidavit signed by (him or her) is true, to the best of (his or her) knowledge and belief. I hereby approve the foregoing affidavit as to age of (name of child); height, (feet and inches); eyes, (color); complexion, (dark or fair); hair, (color). Having no sufficient reason to doubt that (he or she) is of the age therein certified, I hereby certify that (he or she) can read at sight, and write legibly simple sentences in the English language; that (he or she) has regularly attended the public schools, or schools equivalent thereto, during the year previous to applying for such school record, and for the period required by the compulsory attendance laws of this Commonwealth. I have examined the certificate furnished by the principal teacher of the last school which said child attended, which states that (he or she) has received instruction in reading, spelling, writing, English grammar, and geography, and is familiar with the fundamental operations of arithmetic, to and including fractions. I have further satisfied myself that the certificate required by law as to proof of age cannot be produced, for good cause, and said



child may be employed at such times and in such employments as the laws of this Commonwealth permit children to be employed.

This certificate belongs to (name of child), and is to be surrendered to (him or her) when (he or she) leaves the service of the corporation, copartnership, firm, or person or employer, holding the same; but if not claimed by said child within thirty days from such time, it shall be returned to the said common school superintendent or principal teacher, as the case may be.

(Signature of person authorized to approve and sign, with official character or authority.)

SEC. 7. The blank forms of these several certificates shall be furnished, free of charge, by the department of mines of this Commonwealth, upon application by the proper persons, and shall be uniform throughout the State. A duplicate of each employment certificate shall be filled out and kept on file by the city, borough or township common school superintendent, or the principal teacher in localities not under the jurisdiction of any city, borough or township superintendent issuing the certificate, together with a certificate of the registration of birth, baptism or circumcision, or, in case of a foreign-born child, a copy of passenger manifest, passport, or other official record, as herein provided by this act.

SEC. 8. False swearing to any affidavit given in accordance with the provisions of this act shall constitute perjury, and be punishable as such.

SEC. 9. A failure to produce to the common school superintendent, any truant or attendance officer, the chief of the department of mines of this Commonwealth, or any mine inspectors, an employment certificate and the list required by this act, when requested so to do, shall be prima facie evidence of the illegal employment of any minor child whose employment certificate is not produced or whose name is not so listed; and it shall be the duty of the chief of the department of mines of this Commonwealth, and the right of any citizen of this Commonwealth, in the name of the Commonwealth of Pennsylvania, upon any violation of the provisions of this act providing for the keeping and filing of said employment certificate and list of minor children, to bring suit in the court of common pleas of the county wherein said violation occurred; and if, upon the trial of the case, the jury shall find such violation actually did occur, they shall render a verdict against the offending party or parties to an amount equal to ten dollars for each and every day said minor child or children were employed contrary to the provisions of this act; said amounts, when collected, to be paid into the State treasury for the use of the Commonwealth; and the State treasurer shall return one-half of the fine or fines so collected to the school district in which the child, so illegally employed, resided.

SEC. 11. Truant or school attendance officers shall report any cases of such illegal employment to the city, borough or township superintendent, or to the principal teacher in localities not under the jurisdiction of any city, borough or township superintendent, and to the inspector of mines of the district.

SEC. 12. The city, borough or township superintendent, and the principal teachers in localities not within the jurisdiction of any common school superintendent, and their duly authorized deputies, shall have the power to administer oaths and affirmations in all matters where persons desire to swear to, affirm or verify any documents or affidavits necessary to properly carry out the provisions of this act.

SEC. 13. Nothing in this act shall be so construed as to make the employers of minor children liable to the penalties herein mentioned for the illegal employment of said minor children before the fifteenth day of October, Anno Domini one thousand nine hundred and five.

*ACT No. 226.—Age limit—Hours of labor—Employment certificates.*

SECTION 1. The term "establishment" where used for the purpose of this act, shall mean any place within this Commonwealth other than where domestic, coal-mining or farm labor is employed; where men, women or children are engaged, and paid a salary or wages, by any person, firm or corporation, and where such men, women or children are employees, in the general acceptance of the term.

SEC. 2. No child under fourteen years of age shall be employed in any establishment.

SEC. 3. No minor under sixteen, and no female, shall be employed in any establishment for a longer period than sixty hours in any one week, nor for a



longer period than twelve hours in any one day. No minor under sixteen shall be employed in any establishment between the hours of nine postmeridian and six antemeridian: *Provided*, That where the material in process of manufacture requires the application of manual labor for an extended period after nine o'clock postmeridian, to prevent waste or destruction of said material, male minors over fourteen years of age, and who have not been employed in or about such establishment between the hours of six antemeridian and nine postmeridian, may be employed, for not more than nine consecutive hours in any one day, after nine postmeridian: *And provided further*, That in establishments where night work is hereby permitted to prevent waste or destruction, and where the nature of the employment requires two or more working shifts in the twenty-four hours, males over fourteen years of age may be employed, partly by day and partly by night: *Provided*, Said employment does not exceed nine consecutive hours: *And provided further*, That retail mercantile establishments shall be exempt from the provisions of this section on Saturday of each week, and during a period of twenty days beginning with the fifth day of December and ending with the twenty-fourth day of the same month: *Provided*, That during the said twenty days preceding the twenty-fourth day of December, the working hours shall not exceed ten hours per day, or sixty hours per week.

SEC. 4. No minor under sixteen years of age shall be permitted to clean or oil machinery while in motion, or to operate, or otherwise have the care or custody of, any elevator or lift.

SEC. 5. It shall be unlawful for the owner, superintendent, lessee, or other person in charge of any establishment where persons are employed for wages or salary, to employ any child between the ages of fourteen and sixteen years, unless there is first provided, and placed on file in the office of the establishment where said child is employed, a certificate in the form provided by the chief factory inspector, which certificate shall be uniform throughout the State. It shall be the duty of the factory inspector or any of his office force, the deputy factory inspectors, or of the city or borough common school superintendents within their various jurisdictions, or of the principal teacher of the common schools in localities not under the jurisdiction of any city or borough superintendent, or of their respective duly authorized deputies, to issue the employment certificate hereinafter prescribed. No principal teacher shall be authorized to issue said employment certificate within any district over which a superintendent has jurisdiction. The district of such city or borough superintendent or principal teacher shall be the same as that in which the child seeking an employment certificate resides.

SEC. 6. The employment certificate shall state the name, age, date, place of birth, and description (including color of eyes, hair and complexion) of said child, its residence, and the residence of its parent, guardian or custodian, and the ability of said child to read and write simple sentences in the English language, that it has complied with the educational laws of the Commonwealth, and is physically able to perform the work to be required of it.

*Provided*, That before any such certificate of employment is issued, the person authorized to issue the same shall first demand and obtain of the parent, guardian or custodian of said child an affidavit, sworn to before any officer authorized to administer oaths, made by him or her, stating the age, date and place of birth of said child; and shall further demand and obtain a certificate of said child's birth, as kept by any public authority, or, transcript of the record of its birth, baptism or circumcision, as kept by any religious denomination, or, in the case of a foreign-born child (if such evidence of age be lacking), a true copy of the passenger manifest, passport or official record filed at the office of the commissioner of immigration at the port of arrival, as corroborative evidence of the truth of the facts set forth in the affidavit; and shall note in his statement, as aforesaid, the character of such record and by what public or religious authority the same is issued: *Provided, however*, That where no such transcript of public or religious record, or passenger manifest, passport or official record, as aforesaid, of said child's age is obtainable, the same may be substituted by a statement signed by the principal teacher of the last school which said child attended, certifying that said child has received instruction in reading, spelling, writing, English grammar, and geography, and is familiar with the fundamental operations of arithmetic, and has completed the course of study in the common schools prescribed for the first five years, or a course of study in other schools equivalent thereto. At the time of the issue of the employment certificate, the person so issuing the same shall make one copy thereof, which copy shall be filed, within ten days from the date of its issue, in the office of the common



school superintendent in the district in which the child holding the certificate resides; and in districts not having such a superintendent, the said copy shall be filed in the office of the chief factory inspector, and shall be subject to the inspection of the public. The certificate of the registration of birth, baptism or circumcision, or, in the case of a foreign-born child, the copy of passenger manifest, passport or official record, as hereinbefore prescribed, or, in the absence of such transcripts, the statement of the principal teacher, certifying that such child has received instruction as prescribed, as well as the affidavit of the parent, guardian or custodian, shall be filed with a copy of said employment certificate. The certificate when issued shall be the property of the said child, who shall be entitled to a surrender of the certificate to him or her by the employer whenever said child shall leave the service of any employer holding the certificate.

SEC. 10. Every person, firm or corporation employing men, women or children, in any establishment, shall post and keep posted in a conspicuous place, in every room where such help is employed, a printed copy of the factory laws, a printed notice stating the number of hours per day for each day of the week required of such persons; and in every room where children under sixteen years of age are employed, a list of their names, with their ages.

SEC. 25. The chief factory inspector shall prepare the form of the employment certificates for children, and the permits, blanks, orders and notices required by this act; the same to be printed in accordance with the laws regulating printing and publishing, under the supervision of the superintendent of public printing and binding. He shall also divide the State into inspection districts, and assign one of the deputy factory inspectors to each district, and may transfer any of the said inspectors from one district to another, and make such rules and regulations governing their employment as the best interests of the service shall require. And he, the deputy factory inspector, and those employed in the office of the chief factory inspector, shall have the same power to administer oaths or affirmations as is now given to notaries public, in all cases where any person desires to verify documents necessary and incident to the issuing of employment certificates for children.

## PORTO RICO.

### REVISED STATUTES AND CODES—1902.

#### REVISED STATUTES.

##### *Hours of labor—Inhumane treatment.*

SECTION 166. No child of either sex, under sixteen years shall be compelled to work in agricultural factories and manufacturing establishments over six hours per day, three in the morning and three in the afternoon. All persons who shall violate this provision shall be fined in a sum of from five to fifteen dollars, or imprisonment not to exceed thirty days for each offense.

SEC. 167. No foreman, teacher or other person having under his charge the work, care or education of a minor under sixteen years of age, shall resort to inhumane treatment to compel such minor to work or to study. Any violation of the provisions hereof shall be punished with a fine of from five to fifteen dollars or imprisonment not to exceed thirty days for each offense.

#### PENAL CODE.

##### *Certain employments forbidden.*

SECTION 265. Any person, whether as parent, relative, guardian, employer or otherwise, having in his care, custody, or control any child under the age of twelve years, who shall sell, apprentice, give away, let out, or otherwise dispose of any such child to any person, under any name, title, or pretense, for the vocation, use, occupation, calling, service of begging, or peddling, in any public street or highway, or in any mendicant or wandering business whatsoever, and any person who shall take, receive, hire, employ, use, or have in custody any child for such purposes, or either of them, is guilty of a misdemeanor.



## CIVIL CODE.

*Earnings of minors.*

SECTION 225. Property acquired by an unemancipated child by labor or industry, or for any valuable consideration, belongs to the said child, but the usufruct thereof belongs to the parents having *potestas* over him whilst he lives in their company; but if the child, with the consent of his parents, lives independently, he shall be deemed emancipated for all effects as regards the said property, and he shall be the full owner and have the usufruct and administration thereof.

## RHODE ISLAND.

## GENERAL LAWS OF 1896.

CHAPTER 64 (as amended by chapter 1009, enacted 1902)—*Employment during school term.*

SECTION 4. No minor child who has not completed thirteen years of life shall be employed to labor or at service, or engaged in business, except during the vacations of the public schools of the city or town wherein such child resides, or as provided for by section one of this chapter [relating to child's wages needed for support of family, etc.].

SEC. 5. No minor child who has not completed fifteen years of life shall be employed to labor or at service unless he shall present to his employer a certificate made by or under the direction of the school committee of the city or town wherein such child resides; said certificate shall be made on a blank and in a form furnished by the secretary of the State board of education and shall state the name, place and date of birth of said child, and the name and residence of the person having control of said child.

SEC. 6. Every person, whether principal or agent, who shall employ or permit to be employed or shall aid or abet the employment to labor or at service of any minor child above described in section four, who has not complied with the provisions above recited in section five, shall for every such offense or neglect of such duty be fined not exceeding twenty dollars.

CHAPTER 68.—*Age limit—Cleaning machinery.*

SECTION 1 (as amended by chapter 1215, enacted 1905). No child under thirteen years of age shall, on or before the thirty-first day of December, A. D. 1906, and no child under fourteen years of age shall, after said thirty-first day of December, A. D. 1906, be employed or permitted or suffered to work in any factory, manufacturing or business establishment within this State, and no child under sixteen years of age shall be employed or permitted or suffered to work in any factory or manufacturing or business establishment within this State between the hours of eight o'clock in the afternoon of any day and six o'clock in the forenoon of the following day: *Provided, however,* That this restriction as to hours of work shall not apply to mercantile establishments on Saturdays, or on either of the four days immediately preceding Christmas in each year. No child under sixteen years of age shall be employed or permitted or suffered to work in any factory or manufacturing or business establishment unless said child shall present to the person or corporation employing him or her a certificate, given by or under the direction of the school committee of the city or town in which said child resides, certifying, if said certificate is presented on or before the thirty-first day of December, A. D. 1906, that such child has completed thirteen years of age, and if said certificate is presented after said thirty-first day of December, A. D. 1906, that said child has completed fourteen years of age, and stating the name, date and place of birth of such child, which facts shall be substantiated by a duly attested copy of birth certificate, baptismal certificate, or passport, stating also the name and place of residence of the person having control of such child: *Provided, however,* That all age certificates in force at the time of the passage of this act shall be valid until the first day of January, A. D. 1906, and no longer. All certificates required by this act relating to the qualification of children employed in any factory or manufacturing or business establishment coming under the provision of this



statute shall be kept by the employer at the place where such child is employed, and shall be shown to the factory inspectors provided for in this chapter, or either or any of them, on demand by said inspector or inspectors; and the proprietor or manager of any such factory or manufacturing or business establishment who shall refuse to show to any factory inspector any such certificate when demand is made therefor shall be deemed guilty of a misdemeanor and, on conviction, be punished by a fine of not less than ten dollars nor more than fifty dollars. When any child employed under the provisions of this section leaves his employment, the person or corporation by whom such child has been employed shall, on demand by said child, deliver to him (or her) the certificate on the authority of which such child has been employed or, if such certificate is not demanded by said child, shall within two weeks after said child has left the employment of said person or corporation send said certificate to the school committee which issued it, or such person as the school committee may designate. The school committee of each town, or such person as the school committee may designate to issue the certificates provided for in this section, shall keep on file a copy of each certificate granted, together with the evidence of the date of birth on the basis of which such certificate is granted. The certificates provided for in this section shall be uniform throughout the State and in the following form or such substantially similar form as may be approved by the secretary of the State board of education.

#### AGE AND SCHOOLING CERTIFICATE.

This certifies that I am the (father, mother, guardian, or custodian) of (name of child) \_\_\_\_\_, and that (he or she) was born at (name of town or city) \_\_\_\_\_ in the county (name of county, if known) \_\_\_\_\_ and State (or country) of \_\_\_\_\_ on the (day and year of birth) \_\_\_\_\_ and is now (number of years and months) \_\_\_\_\_ old.

(Signature of father, mother, guardian, or custodian).

(Town or city and date.)

There personally appeared before me the above-named (name of person signing) \_\_\_\_\_, and made oath that the foregoing certificate by (him or her) signed is true to the best of (his or her) knowledge and belief. I hereby approve the foregoing certificate of (name of child) \_\_\_\_\_ height (feet and inches) \_\_\_\_\_ eyes (color) \_\_\_\_\_ complexion (fair or dark) hair (color) \_\_\_\_\_, having no sufficient reason to doubt that (he or she) is of the age therein certified, and is apparently in sound health and physically able to perform the work which (he or she) intends to do.

This certificate belongs to (name of child in whose behalf it is drawn) \_\_\_\_\_, and is to be surrendered to (him or her) whenever (he or she) leaves the service of the corporation or employer holding the same; but if not claimed by said child within two weeks from such time it shall be returned to the school committee or such person as such committee may designate.

(Signature of person authorized to approve and sign, with official character or authority.)

(Town or city, and date.)

No action will lie to recover a minor's wages earned while employed in violation of this statute. 13 R. I., 299.

SEC. 2 (as amended by chapter 1215, enacted 1905). Every person, firm, or corporation doing business within this State employing five or more persons, or employing any child under sixteen years of age, shall be subject to the provisions of this chapter, whatever shall be the business conducted by said person, firm, or corporation: *Provided, however*, That the provisions of this act shall not apply to children employed in household service or in agricultural pursuits.

SEC. 6. No minor under sixteen years of age shall be allowed to clean machinery while in motion, unless the same is necessary and is approved by said inspectors as not dangerous. \* \* \*

SEC. 8. Water-closets, earth closets or privies shall be provided in all places where \* \* \* children are employed, in such manner as shall, in the judgment of said inspectors, meet the demands of health and propriety. \* \* \*

SEC. 12 (as amended by chapter 1215, Acts of 1905). Any person or corporation who employs a child under sixteen years of age without the certificate required by section one of this chapter, or who makes a false statement in regard to any part required by such certificate or who violates any of the pro-



visions of this chapter, or who suffers or permits any child or woman to be employed in violation of its provisions, shall be deemed guilty of a misdemeanor and, on conviction, shall be punished by a fine of not more than five hundred dollars: *Provided, however,* That this section shall not apply to that portion of section 1 of this chapter which fixes the penalty for the refusal to show to the inspector any certificate provided for in that section.

CHAPTER 108.—*Employment on elevators.*

SECTION 16 (as amended by chapters 921, enacted 1901, and 973, enacted 1902). \* \* \* no person under the age of eighteen years shall take charge of or operate any passenger elevator.

CHAPTER 115.—*Certain employments forbidden.*

SECTION 4 (as amended by chapter 475, enacted 1897). Every person having the custody or control of any child under the age of sixteen years, who shall exhibit, use or employ, or shall in any manner or under any pretense sell, apprentice or give away, let out or otherwise dispose of any such child to any person for or in the vocation, occupation, service or purpose of rope or wire walking, or as a gymnast, wrestler, contortionist, equestrian performer, acrobat, or rider upon any bicycle or mechanical contrivance, or in any dancing, theatrical or musical exhibition unless it be in connection with churches, schools, or private instruction in dancing or music or unless it be under the auspices of a Rhode Island society incorporated, or organized without incorporation, for a purpose authorized by section 11 of chapter 176 of the General Laws, or unless it be with the written consent, previously obtained and revocable at will, of the mayor of the city or the president of the town council where such child is to be employed; or for or in gathering or picking rags, or collecting cigar stumps, bones, or refuse from markets, or in begging, or in any mendicant or wandering occupation, or in peddling in places injurious to the morals of such child; \* \* \* or in any illegal, obscene, indecent, or immoral purpose, exhibition or practice whatsoever; or for or in any business, exhibition or vocation injurious to the health or morals, or dangerous to the life or limb of such child, or who shall cause, procure or encourage any such child to engage therein, or who after being notified by an officer mentioned in section 6 of this chapter to restrain such child from engaging therein, shall neglect or refuse to do so, shall be held guilty of a misdemeanor and shall, for every such offense, be imprisoned not exceeding one year or be fined not exceeding two hundred [and] fifty dollars, or be both fined and imprisoned as aforesaid, and shall forfeit any right which he may have to the custody of such child.

SEC. 5 (as amended by chapter 475, enacted 1897). Every person who shall take, receive, hire or employ, exhibit, or have in custody, or who shall cause to be taken, hired or employed, exhibited, or held in custody, any child under the age of sixteen years, for any of the purposes prohibited in the preceding section, shall be held guilty of a misdemeanor, and shall be punished for every such offense in the manner provided in said section.

SEC. 6 (as amended by chapter 475, enacted 1897). The town sergeant of any town, the chief of police of any city, or the general agent or agents of the Rhode Island Society for the Prevention of Cruelty to Children may enter any place where any child may be held, detained or employed in violation of this chapter, and without process of law, seize and detain such child and hold him as a witness to certify upon the trial of any person charged with violating the provisions of this chapter; \* \* \*

CHAPTER 198.—*Hours of labor.*

SECTION 22 (as amended by chapter 994, enacted 1902). No minor under sixteen years of age \* \* \* shall be employed in laboring in any manufacturing or mechanical establishment more than fifty-eight hours in any one week; and in no case shall the hours of labor exceed ten hours in any one day, excepting when it is necessary to make repairs to prevent the interruption of the ordinary running of the machinery, or when a different apportionment of the hours of labor is made for the sole purpose of making a shorter day's work for one day of the week.

Every employer shall post in a conspicuous place in every room where such persons are employed a printed notice stating the number of hours' work



required of them on each day of the week; and the employment of any such person for a longer time in any day than so stated shall be deemed a violation of this section, unless it appears that such employment is to make up for time lost on some previous day of the same week in consequence of the stopping of the machinery upon which such person was employed or dependent for employment: *Provided*, That the provisions of this section shall not be construed to enlarge or impair any restriction placed upon the employment of any minor mentioned in chapter 64.

SEC. 23. Every person who willfully employs, or has in his employment or under his charge any person, in violation of the provisions of the preceding section, and every parent or guardian who permits any such minor to be so employed, shall be fined not exceeding twenty dollars for each offense. A certificate of the age of a minor, made by him or by his parent or guardian, at the time of his employment in a manufacturing establishment, shall be conclusive evidence of his age upon any trial of any person other than the parent or guardian for a violation of the preceding section.

## SOUTH CAROLINA.

### CODE OF 1902.

#### CIVIL CODE.

#### *Earnings of minors.*

SECTION 2694. If any person shall hire or employ any minor, or person under the age of twenty-one years, without the knowledge and consent of the parents or guardian of such minor, such person shall pay to the said parents or guardian the full value of the labor of said minor from and after notice from the parents or guardian that payment of such service shall be made to him or them, as the case may be.

### ACTS OF 1903.

#### Act No. 74.—*Age limit—Night work.*

SECTION 1. From and after the first day of May, 1903, no child under the age of ten years shall be employed in any factory, mine or textile manufacturing establishment of this State; and from and after the first day of May, 1904, no child under the age of eleven shall be employed in any factory, mine or textile establishment of this State; from and after the first day of May, 1905, no child under the age of twelve years shall be employed in any factory, mine or textile establishment of this State, except as hereinafter provided.

SEC. 2. From and after May first, 1903, no child under the age of twelve years shall be permitted to work between the hours of 8 o'clock p. m. and 6 o'clock in the morning in any factory, mine or textile manufactory of this State: *Provided*, That children under the age of twelve, whose employment is permissible, under the provisions of this act, may be permitted to work after the hour of 8 p. m. in order to make up lost time, which has occurred from some temporary shut down of the mill, on account of accident or breakdown in the machinery, which has caused loss of time: *Provided, however*, That under no circumstances shall a child below the age of twelve work later than the hour of 9 p. m.

SEC. 3. Children of a widowed mother and the children of a totally disabled father, who are dependent upon their own labor for their support, and orphan children who are dependent upon their own labor for their support, may be permitted to work in textile establishments of this State for the purposes of earning their support: *Provided*, That in the case of a child or children of a widowed mother or of a totally disabled father, the said mother or the said father, and in case of orphan children, the guardian of said children or person standing, in loco parentis of said child or children, shall furnish to any of the persons named in section 4 of this act an affidavit duly sworn to by him or her before some magistrate or clerk of court of the county in which he or she resides, stating that he or she is unable to support the said children, and that the said children are dependent upon their own labor for their support, then, and in that case, the said child or children of the said widowed mother and the said disabled father and said orphan children shall not be affected by the pro-



hibitions of section 1 of this act; and filing of said affidavit shall be full justification for their employment: *Provided, further*, That the officer before whom the said affidavit shall be subscribed shall indorse upon the back thereof his approval and his consent to the employment of said child or children. Any person who shall swear falsely to the facts set forth in said acts shall be guilty of perjury and shall be indictable as provided by law: *Provided, further*, That the employment of said child or children shall be subject to the hours of labor herein limited.

SEC. 4. Any owner, superintendent, manager or overseer of any factory, mine or textile manufacturing establishment, or any other person in charge thereof or connected therewith, who shall knowingly employ any child contrary to the provisions of this act, shall be guilty of a misdemeanor, and for every such offense shall, upon conviction thereof, be fined not less than ten dollars nor more than fifty dollars, or be imprisoned not longer than thirty days, at the discretion of the court.

SEC. 5. Any parent, guardian or other person having under his or her control any child, who consents, suffers or permits the employment of his or her child or ward under the ages as above provided, or who knowingly or willfully misrepresents the age of such child or ward to any of the persons named in section 4 of this act, in order to obtain employment for such child or ward, shall be deemed guilty of a misdemeanor, and for every such offense shall, upon conviction thereof, be fined not less than ten dollars nor more than fifty dollars, or be imprisoned not longer than thirty days, in the discretion of the court.

SEC. 6. Any parent, guardian or person standing in loco parentis, who shall furnish to the persons named in section 4 of this act a certificate that their child or ward has attended school for not less than four months during the current school year, and that said child or children can read and write, may be permitted to obtain employment for such child or children in any of the textile establishments of this State during the months of June, July and August, and the employment of such child or children during the said months upon the proper certificate that such child or children have attended school as aforesaid, shall not be in conflict with the provisions of this act.

SEC. 7. In the employment of any child under the age of twelve years in any factory, mine or textile manufacturing establishment, the owner or superintendent of such factory, mine or textile manufacturing establishment shall require of the parent, guardian or person standing in loco parentis of such child, an affidavit giving the age of such child, which affidavit shall be placed on file in the office of the employer; and any person knowingly furnishing a false statement of the age of such child shall be guilty of a misdemeanor, and for every such offense shall, upon conviction, be fined not less than ten dollars nor more than fifty dollars, or be imprisoned not longer than thirty days, in the discretion of the court.

## **SOUTH DAKOTA.**

### **REVISED CODES OF 1903.**

#### **POLITICAL CODE.**

##### *Employment in mines.*

SECTION 145. All corporations or individuals working mines in South Dakota who shall employ, or permit to be employed, in such mines any children under fourteen years of age shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding one thousand dollars.

##### *Employment during session of school.*

SECTION 2359. Every person having under his control a child between the age of eight and fourteen years, shall annually cause such child to attend for at least twelve weeks, at least eight weeks of which attendance shall be consecutive, in some public day school in the district in which he resides, which time shall commence with the beginning of the first term of the school year or as soon thereafter as due notice shall be served upon the person having such control of his duty under this article. For every neglect of such duty the person offending shall forfeit to the use of the public schools of his school corporation a sum not less than ten dollars nor more than twenty dollars, and shall stand committed until such fine and costs of suit are paid. But if the person so



neglecting shall show to the board of education or district school board, as the case may be, that such child has attended for a like period of time a private day school, or that instruction has otherwise been given for a like period to such child, in branches commonly taught in public school, that such child has already acquired the branches of learning taught in the public schools, or that his physical or mental condition as declared by a competent physician is such as to render such attendance inexpedient and impracticable, then such penalty shall not be incurred. \* \* \*

SEC. 2361. No child between eight and fourteen years of age shall be employed in any mine, factory or workshop or mercantile establishment, or, except by his parent or guardian, in any other manner during the hours when the public schools in the city, town, village or district, are in session unless the person, firm or corporation employing him shall first procure a certificate from the superintendent of the schools of the city, town or village, if one be employed, otherwise from the clerk of the school board or board of education, stating that said child has attended school for the period of twelve weeks during the year, as required by law, or has been excused from attendance as provided in section 2359; and it shall be the duty of such superintendent or clerk to furnish such certificate upon application of the parent, guardian or other person having control of such child, entitled to the same. Every owner, superintendent or overseer of any mine, factory, workshop, or mercantile establishment, and any other person who shall employ any child between eight and fourteen years of age contrary to the provisions of this article, shall be deemed guilty of a misdemeanor, and for every such offense shall upon conviction thereof, be fined not less than ten dollars nor more than twenty dollars and costs.

SEC. 2362. Any person having control of a child who with the intent to evade the provisions of this article, shall make a willfully false statement concerning the age of such child or the time such child shall attend school, shall for such an offense forfeit a sum not less than ten dollars nor more than twenty dollars for the use of the public school corporation.

#### *Employment in barrooms.*

SECTION 2844 (as amended by chapter 165, Acts of 1903). \* \* \* it shall also be unlawful for any person to whom any license may be granted to employ any person under twenty-one (21) years of age as a bartender or in any other capacity in connection with the place or room where intoxicating liquors are sold.

#### CIVIL CODE.

#### *Earnings of minors.*

SECTION 124. The wages of a minor employed in service may be paid to him or to her until the parent or guardian entitled thereto gives the employer notice that he claims such wages.

#### PENAL CODE.

#### *Hours of labor.*

SECTION 764. Every owner, stockholder, overseer, employer, clerk or foreman of any manufactory, workshop or other place used for mechanical or manufacturing purposes, who, having control, shall compel \* \* \* any child under eighteen years of age, or permit any child under fourteen years of age, to labor in any day exceeding ten hours, shall be deemed guilty of a misdemeanor, and upon conviction, shall be punished by a fine not exceeding one hundred and not less than ten dollars.

#### TENNESSEE.

#### ACTS OF 1893.

#### CHAPTER 159 (as amended by chapter 34, Acts of 1901).—*Age limit.*

SECTION 1. It shall be unlawful for a proprietor, foreman, owner or other person to employ any child less than 14 years of age in any workshop, factory or mine in this State; unless said proprietor, foreman or owner shall know the age of the child, it shall be his or their duty to require the parent or guardian to furnish a sworn statement of its age, and any swearing falsely to such by the parent or guardian shall be perjury and punishable as such.



SEC. 2. Any proprietor, foreman or owner employing a child less than 14 years of age in conflict with the provisions of this act, except where such proprietor, foreman or owner has been furnished with a sworn statement of guardian or parent, that the child is more than 14 years of age, shall be guilty of a misdemeanor, and upon conviction, shall be fined not less than \$25 and not more than \$250.

SEC. 3. The grand jury shall have inquisitorial powers to investigate violations of this act, and judges of the circuit and criminal courts of the State shall specially charge the grand jury at the beginning of each term of the court to investigate violations of this act.

The employment of a child in violation of this law constitutes such negligence as makes the employer liable for all injuries sustained by the infant in the course of his employment. 65 S. W. Rep. 399.

[The following annotation is based on an act of 1881, relating to employment in mines only:]

The employment of a boy under twelve years of age in violation of this statute is negligence, but the defense of contributory negligence may be set up in an action by such boy for injuries sustained by reason of his employment. 32 S. W. Rep. 460.

## TEXAS.

### ACTS OF 1903.

#### CHAPTER 28.—*Age limit—Illiterates—Night work—Employment in mines, distilleries, or breweries.*

SECTION 1. Any person or any agent or employee of any person, firm or corporation, who shall hereafter employ any child under the age of twelve years to labor in or about any mill, factory, manufacturing establishment, or other establishment using machinery, shall be deemed guilty of a misdemeanor, and upon conviction shall be fined not less than fifty dollars, and not more than two hundred dollars, and each day the provisions of this act are violated shall constitute a separate offense.

SEC. 2. Any person, or any agent or employee of any person, firm or corporation, who shall hereafter employ any child between the ages of twelve and fourteen years (who can not read and write simple sentences in the English language) to labor in or about any mill, factory, manufacturing establishment, or other establishment using machinery, shall be deemed guilty of a misdemeanor, and upon conviction shall be fined not less than fifty dollars, nor more than two hundred dollars; and each day the provisions of this act are violated shall constitute a separate offense: *Provided*, That such child who has a widowed mother, or parent incapacitated to support it, may be employed between the hours of 6 a. m. and 6 p. m.: *Provided, further*, That such parent is incapacitated from earning a living, and has no means of support other than the labor of such child; and in no event shall any child between the ages of twelve and fourteen years be permitted to work outside the hours between 6 a. m. and 6 p. m.

SEC. 3. Any person, or agent or employee of any person, firm or corporation, owning, operating or assisting in operating, any mine, distillery or brewery, who shall employ any child under the age of sixteen years to labor in or about any mine, distillery or brewery, shall be deemed guilty of a misdemeanor, and upon conviction shall be fined not less than fifty, nor more than two hundred dollars.

## UTAH.

### CONSTITUTION.

#### ARTICLE 16.—*Employment in mines.*

SECTION 3. The legislature shall prohibit:

(1) The employment of \* \* \* children under the age of fourteen years, in underground mines.

\* \* \* \* \*



## REVISED STATUTES—1898.

*Employment in mines and smelters.*

SECTION 1338. It shall be unlawful for any person, firm, or corporation to employ any child under fourteen years of age, \* \* \* to work in any mine or smelter in the State of Utah. Any person, firm, or corporation who shall violate any of the provisions of this section shall be deemed guilty of a misdemeanor.

*Earnings of minors.*

SECTION 1544. When a contract for the personal services of a minor has been made with him alone, and those services are afterward performed, payment made therefor to such minor in accordance with the terms of the contract, is a full satisfaction for those services, and the parent or guardian can not recover therefor a second time.

*Exemption of wages from execution, etc.*

SECTION 3243. The earnings of any minor child of any debtor within this State and the proceeds thereof are exempt from execution against such debtor by reason of any debts or liability of such debtor, not contracted for the special benefit of such minor child.

## VERMONT.

## STATUTES OF 1894.

*Age limit—School attendance.*

SECTION 712 (as amended by act No. 155, Acts of 1904). No child under sixteen years of age shall be employed in any mill, factory or workshop unless such child has attended public school twenty-eight weeks during the current year, and deposited with the owner or superintendent of such mill, factory or workshop a certificate of such attendance at school, signed by the teacher thereof, or unless such child has attended a private or parochial school, for the same length of time and deposited with such owner or superintendent a certificate from the superintendent of school or some member of the board of school directors of the town or city where he is so employed showing such school attendance.

SEC. 715. The town superintendent may inquire of the owner or overseer of a mill or factory as to the employment of children therein, may call for the production of the certificate deposited with such owner or overseer, and satisfy himself that the requirements of law have been complied with.

## ACTS OF 1904.

Act No. 115.—*Employment in barrooms.*

SECTION 23. Licenses shall be subject to the following conditions and prohibitions.

\* \* \* \* \*

That no \* \* \* person under the age of twenty-one years, shall be employed in the bar room in which a license is operated.

Act No. 155.—*Age limit—School attendance—Night work.*

SECTION 1. No child under the age of twelve years shall be employed, permitted or suffered to work in any mill, factory or workshop, or in carrying or delivering messages for any corporation or company. No child under the age of fifteen years shall be employed, permitted or suffered to work in any mill, factory or workshop, or in carrying or delivering messages for any corporation or company during the school hours in any part of the term during which the public schools of the town, city or incorporated school district in which the child resides are in session, or after eight o'clock in the evening of any day.

SEC. 3. Any person who shall employ or suffer to be employed in any mill, factory or workshop of which he is the owner, or owner in part, or of which he



is the superintendent or manager, any child in violation of the provisions of this act [includes section 712, Statutes of 1894, as amended], and a parent or guardian who allows or consents to such employment, shall be fined fifty dollars.

SEC. 4. County courts, municipal courts and justices of the peace shall have concurrent jurisdiction of offenses under this act and truant officers and all informing officers are authorized to make complaint for violation of this act.

## VIRGINIA.

### CODE—1904.

#### *Employment while parents live in idleness.*

SECTION 884. The following persons shall be deemed vagrants:

\* \* \* \* \*

All persons who are able to work and who do not work, but hire out their minor children and live upon their wages.

#### *Earnings of minors.*

SECTION 3652c. The wages of a minor shall not be liable to garnishment or otherwise liable to the payment of the debts of parents.

#### *Hours of labor—Night work—Age limit.*

SECTION 3657b. No \* \* \* child under fourteen years of age shall work as an operative in any factory or in any factory or manufacturing establishment in this State more than ten hours in any one day of twenty-four hours. All contracts made or to be made for the employment \* \* \* of any child under fourteen years of age as an operative in any factory or manufacturing establishment to work more than ten hours in any one day of twenty-four hours, are and shall be void. Any person having the authority to contract for the employment of persons as operatives in any factory or manufacturing establishment who shall engage or contract with \* \* \* any child under fourteen years of age to work as an operative in such factory or manufacturing establishment during more than ten hours in any one day of twenty-four hours shall be guilty of a misdemeanor, and be fined not less than five nor more than twenty dollars.

SEC. 3657bb. No child under the age of fourteen years and over twelve years of age shall be employed in any manufacturing, mechanical, or mining operations in this Commonwealth to work between the hours of six o'clock post-meridian and seven o'clock antemeridian; and no child under the age of twelve years shall be employed in any manufacturing, mechanical, or mining operation in this Commonwealth; and any owner, agent, superintendent, overseer, foreman, or manager of any manufacturing, mechanical, or mining operation who shall knowingly employ, or permit to be employed, in the operation of which he is owner, agent, superintendent, overseer, foreman, or manager any child contrary to the provisions of this act, and any parent or guardian who allows or consents to such employment of his child or ward, shall, upon conviction of such offense, be fined not less than twenty-five dollars nor more than one hundred dollars.

#### *Certain employments forbidden.*

SECTION 3795a. \* \* \* (2) It shall be unlawful for any person having the care, custody, or control of any child under the age of fourteen years to sell, apprentice, give away, let, or hire out, or otherwise dispose of such child to any person in or for the vocation or occupation, service, or purpose of rope or wire walking, begging or peddling, or as a gymnast, contortionist, rider, or acrobat in any place whatsoever, or for any obscene, indecent, or immoral purpose, exhibition, or practice whatsoever, or for or in any business, exhibition, or vocation injurious to the health or morals or dangerous to the life or limb of such child, or cause, procure, encourage, or permit any such child to engage therein.

(3) It shall also be unlawful for any person to take, receive, hire, employ, use, exhibit, or have in custody any child under the age aforesaid for any of the purposes prohibited in the second section of this act.

(6) Whenever any person or persons having the care or custody of any child within the age previously mentioned in this act shall engage, hire out, or use



such child in or for any business, exhibition, vocation, or purpose prohibited in this act, or shall permit the use of such child therefor, and shall be convicted of the same, the court or magistrate before whom such conviction is had may at his discretion if he should think it desirable for the welfare of such child deprive the person or persons so convicted of the custody of such child, and thereafter such child shall be deemed in the custody of the court, and thereupon such proceedings shall be had as to the commitment, custody, care, and education of such child as are provided for in section five of this act [for vagrant or destitute children].

(7) A person convicted under any of the provisions of this act shall be deemed guilty of a misdemeanor and shall be punished by a fine not exceeding two hundred dollars or by imprisonment in jail not exceeding twelve months or both.

(8) In this act the word "person" shall be construed to include corporations, partnerships, companies, and associations, as well as individuals.

### WASHINGTON.

#### CODES AND STATUTES OF 1897.

##### *Employment in mines.*

SECTION 3172. No boy under the age of fourteen years, and no female of any age, shall be employed or permitted to be in any mine for the purpose of employment therein, nor shall a boy under the age of twelve years be employed or permitted to be in or about the outside structures or workings of a colliery for the purpose of employment: *Provided, however,* That this prohibition shall not affect the employment of a boy of suitable age in an office or in the performance of clerical work at a colliery. When an employer is in doubt as to the age of any boy applying for employment in or about a mine or colliery, he shall demand and receive proof of the age of such boy by certificate from the parents or guardian of such boy before he shall be employed.

##### *Earnings of minors.*

SECTION 4583. When a contract for the personal services of a minor has been made with him alone, and those services are afterwards performed, payment made therefor to such minor in accordance with the terms of the contract is a full satisfaction for those services, and the parents or guardian can not recover therefor.

#### ACTS OF 1903.

##### CHAPTER 135.—*Night work in bakeries.*

SECTION 9. No employer shall require, permit or suffer any person under sixteen years of age to work in his bake shop between the hours of eight o'clock in the evening and five o'clock in the morning.

SEC. 10. Any person who violates the provisions of this act \* \* \* shall be guilty of a misdemeanor, and on conviction thereof before any court of competent jurisdiction, shall be fined not less than twenty-five nor more than fifty dollars or imprisoned not more than ten days for the first offense; and shall be fined not less than fifty nor more than one hundred dollars and imprisoned not less than ten nor more than thirty days for each offense after the first.

##### CHAPTER 136.—*Female messengers—Age limit.*

SECTION 1. No female person under eighteen years of age shall be employed as public messenger by any person, telegraph company, telephone company, or messenger company in this State, nor shall any child of either sex under the age of fourteen years be hired out to labor in any factory, mill, workshop or store at any time, provided that any superior court judge, living within the residence district of any such child, may issue a permit for the employment of any child between the ages of twelve and fourteen years at any occupation, not in his judgment, dangerous or injurious to the health or morals of such child, upon evidence, satisfactory to him, that the labor of such child is necessary for its support or for the assistance of any invalid parent. Such permits shall



be issued for a definite time, but shall be revocable at the discretion of the judge by whom they are issued.

SEC. 2. Any employer, overseer, superintendent, or agent of such employer, who shall violate any of the provisions of this act shall, upon conviction thereof, be fined for each offense not less than \$50 nor more than \$100, or be imprisoned in the county jail not exceeding one month.

Employment as well as hiring out is forbidden. An employer who knowingly employs or keeps in his employ a minor within the prohibited age is guilty of a violation of the statute, and the employment itself is illegal.

A minor's misrepresentation of his age is not a defense in an action growing out of his unlawful employment, as a fraudulent representation of capacity can not be an equivalent for an actual capacity. S1 Pac. Rep. S69.

## ACTS OF 1905.

### CHAPTER 162.—*School attendance—Certificates.*

SECTION 1. All parents, guardians and other persons in this State having or who may hereafter have immediate custody of any child from eight to fifteen years of age shall cause such child to attend the public schools of the district in which the child resides for the full time in which such school may be in session, or private school for the same time, unless the child is physically or mentally unable to attend, has already attained a reasonable proficiency in the branches required by law to be taught in the first eight grades of public schools in this State or provided by the course of study of the said school, is otherwise being furnished with the same education, or has been excused from such attendance for some other sufficient reason by the superintendent of the schools of the district in which the child resides, if there be such a superintendent, or, in all other cases, by the county superintendent of common schools.

SEC. 2. No child under the age of fifteen years shall be employed in any manufacturing, mechanical or other mercantile establishment, or by any telegraph or telephone company, or by any other corporation in this State during the time in which the public schools of the district in which such child resides are in session, unless the said child shall present a certificate from a school superintendent, as provided for in section one of this act, excusing the said child from attendance in the public schools and setting forth the reason for such excuse, the residence and age of the child, and the time for which such excuse is given. Every owner, superintendent, or overseer of any establishment, corporation or company employing any such child shall keep such certificate on file so long as such child is employed by him or her. The form of said certificate shall be furnished by the superintendent of public instruction.

SEC. 3. Any person violating the provisions of the two preceding sections shall be fined not more than twenty-five dollars. Attendance officers shall make complaint for violation of the provisions of this act to a justice of the peace or to the judge of the superior court.

SEC. 4. \* \* \* The attendance officer shall be vested with police powers, the authority to make arrests and serve all legal processes contemplated by this act, and shall have authority to enter all stores, mills, shops or other places in which children may be employed, for the purpose of making such investigations as may be necessary to the enforcement of this act. \* \* \*

## WEST VIRGINIA.

### CODE—EDITION OF 1899.

#### APPENDIX.

#### *Employment in mines.*

(Page 1053.)

SECTION 13. No boy under twelve years of age, nor female person of any age, shall be permitted to work in any coal mine, and in all cases of doubt, the parents or guardians of such boys shall furnish affidavits of their ages.

SEC. 17. The operator or agent of any coal mine, who shall willfully neglect or refuse to perform the duties required of him by any section of this act, or who shall violate any of the provisions hereof, and any person who shall neglect or



refuse to perform the duties required of him by sections \* \* \* thirteen \* \* \* or who shall violate any of the provisions thereof, \* \* \* shall be guilty of a misdemeanor, and upon conviction, shall be punished by a fine of not less than fifty dollars nor more than five hundred dollars; in default of payment of such fine and costs for the space of ten days, the defendant may in the discretion of the court, be imprisoned in the county jail for a period not exceeding three months.

SEC. 18. The provisions of this act shall apply only to coal mines in which ten or more persons are employed in a period of twenty-four hours.

*Age limit—Employment during school term.*

(Act, page 1055, as amended by chapter 75, Acts of 1905.)

SECTION 1. No minor, male or female, under the age of twelve years shall be employed for wages or otherwise in any mine, factory, workshop, mercantile or manufacturing establishment where goods or wares are made or sold, and no such minor under the age of fourteen years shall be employed during the free school term of the district in which such child resides: *Provided, however,* That this section shall not be construed to apply if such employment will not interfere with the regular attendance at the school of such minor. And in all cases of minors applying for work it shall be the duty of the manager, superintendent, foreman or operator, to see that the provisions of this section are complied with.

SEC. 2. Any manager, superintendent, foreman or operator in any mine, factory, workshop, mercantile or manufacturing establishment, and parents and guardians, allowing any child to work in violation of section one of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than ten dollars nor more than twenty dollars for each and every offense.

SEC. 3. It shall be the duty of the prosecuting attorney to enforce the provisions of this act, and to prosecute the violations of the same before any magistrate or court of competent jurisdiction in this State, and it shall be the duty of the commissioner of labor to report all violations of this act to the prosecuting attorney.

ACTS OF 1901.

CHAPTER 14.—*Certain employments forbidden.*

SECTION 2. Any person having the care, custody, or control of any minor child under the age of fifteen years, who shall in any manner sell, apprentice, give away, or otherwise dispose of such child, or any person who shall take, receive or employ such child for the vocation or occupation of rope or wire walking or as an acrobat, gymnast, contortionist or rider, and any person who, having the care, custody, or control of any minor child whatsoever, shall sell, apprentice, give away or otherwise dispose of such child, or who shall take, receive or employ such child for any obscene, indecent or illegal exhibition or vocation, or any vocation injurious to the health, or dangerous to the life or limb, of such child engaged therein, or for the purpose of prostitution, and any person who shall retain, harbor, or employ any minor child in or about any assignation house or brothel, or any place where any obscene, indecent or illegal, exhibition takes place, shall be guilty of a misdemeanor, and shall be fined not less than five dollars, nor more than one hundred dollars, for each offense.

SEC. 3. Any person having the care, custody, or control, lawful or unlawful, of any minor child under the age of eighteen years, who shall use such minor, or apprentice, give away, let out, hire or otherwise dispose of, such minor child to any person, for the purpose of singing, playing on musical instruments, begging or for any mendicant business whatsoever in the streets, roads, or other highways of this State, and whosoever shall take, receive, hire, employ, use or have in custody, any minor for the vocation, occupation, calling, service or purpose of singing, playing upon musical instruments or begging upon the streets, roads or other highways of this State, or for any mendicant business whatever shall be guilty of a misdemeanor and shall be fined not less than five dollars nor more than one hundred dollars.

SEC. 4. Any person having the care, custody, or control of any minor child under the age of fifteen years, who shall in any manner sell, apprentice, give away or permit such child to sing, dance, act, or in any manner exhibit it in



any dance house, concert saloon, theater or place of entertainment where wines or spirituous or malt liquors are sold or given away, or with which any place for the sale of wines or spirituous or malt liquors is directly or indirectly connected by any passageway or entrance, and any proprietor of any dance house whatever, or any such concert saloon, theater, or place of entertainment, so employing any such child, shall be guilty of a misdemeanor, and shall be fined not less than five dollars nor more than one hundred dollars for each offense.

### WISCONSIN.

#### ANNOTATED STATUTES OF 1898.

##### *Hours of labor—Age limit.*

SECTION 1728. In all manufactories, workshops or other places used for mechanical or manufacturing purposes the time of labor of children under the age of eighteen years \* \* \* employed therein shall not exceed eight hours in one day; and any employer, stockholder, director, officer, overseer, clerk or foreman who shall compel \* \* \* any such child to labor exceeding eight hours in any one day, or who shall permit any child under fourteen years of age to labor more than ten hours in any one day in any such place, if he shall have control over such child sufficient to prevent it, or who shall employ at manual labor any child under twelve years of age in any factory or workshop where more than three persons are employed, or who shall employ any child of twelve and under fourteen years of age in any such factory or workshop for more than seven months in any one year shall be punished by fine not less than five nor more than fifty dollars for each such offense.

The mere employment of a child under the prescribed age, and his presence in a factory, do not constitute actionable negligence on the part of the employer. 93 Wis. 448.

SEC. 1728a. No child under fourteen years of age shall be employed at labor or service in any mine, factory, workshop or place of public entertainment or amusement except upon permit as hereinafter provided; but nothing herein shall interfere with or prohibit the employment of such child in the service of its parents outside of school hours. The county judge of the county wherein any child resides may, by order entered of record, grant a permit and deliver a copy thereof under seal to any child over twelve years of age exempting such child from the operation of this section as to employment. Every such permit shall specify the conditions and the time during which such child may be employed and fix such limitations as to said judge shall seem proper; and in determining whether such permit shall be granted the judge shall consider the moral and physical condition of the child, his state of education, the necessities of the family to which such child belongs and such other circumstances as, in the discretion of the judge, ought to affect the question of exemption. No charge or fee shall be required in any matter under this section: *Provided*, That where such child resides at a distance of more than ten miles from the county seat the power to grant permits herein conferred upon the county judge may, under the same limitations and with the same conditions, be exercised by the mayor of the city or the president of the village in which or nearest to which said child or its parents resides. Any person, company, firm or corporation that employs or permits to be employed at work any child in violation of the foregoing provisions and any parent or other person having the control of any such child who permits such employment shall be punished by a fine of not less than ten dollars nor more than fifty dollars.

##### *Earnings of minors.*

SECTION 2344a (added by chapter 226, Acts of 1905). During any time when, by reason of abandonment, drunkenness or profligacy, a parent of a minor shall neglect or refuse to provide for his support, or for his support and education, the earnings of such minor shall be his sole property as against such parent or any creditor of such parent.

##### *Certain employment forbidden.*

SECTION 4587a. Any person having the care, custody or control of any child under the age of fourteen years who shall exhibit, use or employ, or in any manner or under any pretense sell, apprentice, give away, let out or otherwise dis-



pose of such child to any person for any obscene, indecent or immoral purpose, exhibition or practice, or for any business, exhibition or vocation injurious to the health or dangerous to the life or limb of such child, or who shall cause, procure or encourage any such child to engage therein, and any person who shall take, receive, hire, employ, use, exhibit or have in custody any such child for any such purpose shall be punished by imprisonment in the county jail not exceeding six months or by fine of not more than one hundred dollars, or by both imprisonment and fine.

#### ACTS OF 1899.

##### CHAPTER 79.—*Employment in cigar factories.*

SECTION 6. No person under eighteen years of age shall be employed or permitted to work in a cigar shop or a cigar factory at manufacturing cigars for longer than eight hours a day or forty-eight hours a week.

SEC. 8. Any person violating any provision of this act shall be punished by fine not exceeding twenty-five dollars and no less than ten dollars for the first offense, and by fine not exceeding fifty dollars, and no less than twenty-five dollars for the second and each following offense.

##### CHAPTER 274 (as amended by chapter 349, Acts of 1903).—*Age limit—School attendance—Hours of labor—Night work—Employment on elevators.*

SECTION 1. No child between the ages of fourteen and sixteen years shall be employed at any time in any factory or workshop, bowling alley, barroom, beer garden, in or about any mine, store, office, hotel, mercantile establishment, laundry, telegraph, telephone, public messenger service or work for wages at any gainful occupation at any place, unless there is first obtained from the commissioner of labor, State factory inspector, any assistant factory inspector, or from the judge of the county court or municipal court or from the judge of a juvenile court where such child resides, a written permit authorizing the employment of such child within such time or times as the said commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge or judge of a juvenile court may fix. No child under fourteen years of age shall be employed at any time in any factory or workshop, bowling alley, barroom, beer [beer] garden, or in or about any mine. No child under fourteen years shall be employed, required or suffered to work for wages at any gainful occupation at any time except that during the vacation of the public school in the town, district or city where any child between the ages of twelve and fourteen years resides, it may be employed in any store, office, hotel, mercantile establishment, laundry, telegraph, telephone or public messenger service in the town, district or city where it resides, and not elsewhere: *Provided*, That there is first obtained from the commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge, or from the judge of a juvenile court where such child resides, a written permit authorizing the employment of such child within such time or times as the said commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge or judge of a juvenile court may fix. The said commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal, or judge of a juvenile court shall keep a record, stating the name, date and place of birth and place of school attended by any such child, and the county judge, municipal judge or such judge of a juvenile court shall report when so requested by the commissioner of labor or State factory inspector, the number of permits issued by him from time to time as hereinbefore provided. When the commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge, or judge of a juvenile court has reason to doubt the age of any child who applies for such permit, commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge or judge of a juvenile court shall demand proof of such child's age by the production of a verified baptismal certificate or a duly attested birth certificate, or in case such certificate can not be secured, by the record of age stated in the first school enrollment of such child, and if such proof does not exist or can not be secured then by the production of such other proof as may be satisfactory to said commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge or judge of a juvenile court, and no permit shall be issued unless proof of such child's age is



filed with the said commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge or judge of a juvenile court. Whenever it appears that a permit has been obtained by a wrong or false statement as to any child's age, the commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge or judge of a juvenile court of the county where such child resides shall revoke such permit.

SEC. 2. It shall be the duty of every person, firm or corporation, agent or manager of any firm or corporation employing minors in any mine, factory or workshop, bowling alley, barroom, beer garden, store, office, hotel, mercantile establishment, laundry, telegraph, telephone or public messenger service within this State to keep a register in the place where such minor is employed and subject at all times to the inspector, or assistant factory inspector, in which register shall be recorded the name, age and date of birth, place of residence, of every child employed, permitted or suffered to work therein, under the age of sixteen years, and it shall be unlawful for any person, firm or corporation, agent or manager of any firm or corporation to hire or employ, permit or suffer to work in any mine, mercantile establishment, factory or workshop, bowling alley, barroom, beer garden, store, office, hotel, laundry, telegraph, telephone or public messenger service, any child under sixteen years of age unless there is first provided and placed on file in such mine, mercantile establishment, factory, or workshop, bowling alley, barroom, beer garden, store, office, hotel, laundry, telegraph, telephone or public messenger [office], a permit granted by either the commissioner of labor, State factory inspector, any assistant factory inspector, county judge, municipal judge, or judge of a juvenile court of the county court where such child resides.

SEC. 3. No person under the age of sixteen years shall be employed, required, permitted or suffered to work for wages at any gainful occupation longer than ten hours in any one day, nor more than six days in any one week, nor after the hour of nine at night nor before the hour of six in the morning: *Provided*, That this section shall not apply to boys carrying newspapers between the hours of four and six in the morning.

SEC. 4. It shall be the duty of the commissioner of labor, the factory or assistant factory inspector to enforce the provisions of this act, and to prosecute violation of the same before any court of competent jurisdiction in this State. It shall be the duty of said commissioner of labor or the factory or assistant factory inspectors, and they are hereby authorized and empowered to visit and inspect, at all reasonable times, and as often as possible, all places covered by this act.

SEC. 5. The commissioner of labor, the factory or assistant factory inspector shall have the power to demand a certificate of physical fitness, from some regularly licensed physician, in the case of children who may seem physically unable to perform the labor at which they may be employed, and no minor shall be employed who can not obtain such a certificate.

SEC. 6. No firm, person or corporation shall employ or permit any child under sixteen years of age to have the care, custody, management or operation of any elevator.

SEC. 7. The words "manufacturing establishment," "factory" or "workshop" as used in this act, shall be construed to mean any place where goods or products are manufactured or repaired, dyed, cleaned or stored [sorted], stored or packed, in whole or in part, for sale or for wages, and not for the personal use of the maker or his or her family or employer.

SEC. 8. Any person, firm or corporation, agent or manager of any corporation who, whether for himself or for such firm or corporation or by himself or through agents, servants, or foreman, shall violate or fail to comply with any of the provisions of this act or shall hinder or delay the commissioner of labor, the factory or assistant inspectors or any or either of them in the performance of their duty or refuse to admit or shut or lock them out from any place required to be inspected by this act, shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not less than ten dollars nor more than one hundred dollars for each offense. Any corporation which, by its agents, officers or servants, shall violate or fail to comply with any of the above provisions of this act shall be liable to the above penalties, which may be recovered against such corporations in action for debt or assumpsit brought before any court of competent jurisdiction.

SEC. 9. Any parent or guardian, who suffers or permits a child to be employed, or suffered or permitted to work, in violation of this act shall be guilty of a mis-



demeanor and upon conviction thereof, shall be fined not less than five nor more than twenty-five dollars.

SEC. 10. When in any proceeding in any court under this section there is any doubt as to the age of any child, a verified baptismal certificate or a duly attested birth certificate shall be produced and filed with the court. In case such certificates can not be secured, upon proof of such fact, the record of age stated in the first school enrollment of such child shall be admissible as evidence thereof.

#### CHAPTER 330.—*Certain employments forbidden.*

SECTION 3. No license shall be granted for a theatrical exhibition or public show in which children under fifteen years of age are employed as acrobats, contortionists or in any feats of gymnastics or equestrianism, when in the opinion of the board of officers authorized to grant licenses such children are employed in such manner as to corrupt their morals or impair their physical health.

SEC. 4. Any person who shall violate any of the provisions of this act shall, upon conviction, be fined in a sum not exceeding one hundred dollars.

#### ACTS OF 1903.

##### CHAPTER 402.—*Female messengers.*

SECTION 1. No female under eighteen years of age shall be employed as a messenger by any telegraph or telephone company, firm or corporation or by any company, firm, corporation or individual engaged in similar business.

SEC. 2. Whoever violates the provisions of this act shall be punished by a fine of not less than twenty-five dollars nor more than two hundred dollars or by imprisonment for not more than six months.

#### ACTS OF 1905.

##### CHAPTER 246.—*Unlawful employment.*

SECTION 1. Any truant officer within this State shall have power to visit factories, workshops, mercantile establishments, and other places of employment in their respective localities and ascertain whether any minors are employed therein contrary to law. They may require that the age and school certificates and lists of minors who are employed in such factories, workshops, mercantile establishments and other places of employment, shall be produced for their inspection, and they shall report all cases of such illegal employment to the school authorities of their respective cities, towns, villages or districts and to the commissioner of labor, State factory inspector or any assistant factory inspector. Such truant officer shall receive no compensation from the State for performing such services.

#### WYOMING.

#### CONSTITUTION.

##### ARTICLE 9.—*Employment in mines.*

SECTION 3. No boy under the age of fourteen years and no woman or girl of any age shall be employed or permitted to be in or about any coal, iron or other dangerous mines for the purpose of employment therein: *Provided, however,* This provision shall not affect the employment of a boy or female of suitable age in an office or in the performance of clerical work at such mine or colliery.

#### REVISED STATUTES—1899.

##### DIVISION I.

##### *Certain employments forbidden—Employment in mines.*

SECTION 2289. It shall be unlawful for any person having the care, custody or control of any child under the age of fourteen years to exhibit, use or employ, or in any manner, or under any pretense, sell, apprentice, give away, let out or



otherwise dispose of any such child to any person, in or for the vocation or occupation, service or purpose of singing, playing on musical instruments, dancing, rope or wire walking, begging or peddling, or as a gymnast, contortionist, rider or acrobat, in any place whatsoever; or as an actor or performer in any concert hall or room where intoxicating liquors are sold or given away, or in any variety theater, or for any illegal, obscene, indecent or immoral purpose, exhibition or practice whatsoever; or for or in any business exhibition or vocation, injurious to the health or dangerous to the life or limb of such child, or cause, procure or encourage such child to engage therein. Nothing in this section contained shall apply to or affect the employment or use of any child as a singer or musician in any church, school or academy, or at any respectable entertainment, or the teaching or learning the science or practice of music. It shall be unlawful for any person to take, receive, hire, employ, use, exhibit or have in custody any child, under the age, and for the purposes prohibited in this section.

SEC. 2295. Any person who shall take, receive, hire or employ, either in his or her own behalf, or as the agent, servant or employee of any person, persons, association of persons, copartnership, company, corporation, any boy or male child under the age of fourteen years, or any woman or girl of any age, or shall allow or permit the said persons to be in or about any coal, iron or other dangerous mine, or underground works or dangerous place whatsoever in this State, for the purpose of employment therein or thereabouts, shall be fined not less than twenty-five dollars, nor more than one hundred dollars to which may be added imprisonment in the county jail not more than six months; *Provided, however,* That the provisions of this section shall not affect or apply to the employment of a boy or female of suitable age in an office, or in the performance of clerical work at such mine, colliery or place.

#### ACTS OF 1903.

##### CHAPTER 35.—*Mining regulations.*

SECTION 8. No person \* \* \* under eighteen years of age shall be employed as hoisting engineer.

#### UNITED STATES.

#### ACTS OF 1890-91.

##### CHAPTER 564.—*Employment in mines.*

SECTION 12. No child under twelve years of age shall be employed in the underground workings of any mine. And no father or other person shall misrepresent the age of anybody so employed. Any person guilty of violating the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not to exceed one hundred dollars.

[This section applies to coal mines in the Territories of the United States, unless superseded by act of Territorial legislature, certified by the governor of the Territory to the Secretary of the Interior.]



## RECENT REPORTS OF STATE BUREAUS OF LABOR STATISTICS.

NEW YORK.

*Third Annual Report of the Department of Labor, for the year ended September 30, 1903.* Transmitted to the legislature March 14, 1904. John McMackin, Commissioner. 3 vols.

This general report embraces the following: Volume I, Report of the commissioner of labor on the operations of the department, legislation and judicial decisions affecting the interests of working people, eighth annual report of the State free employment bureau in New York City, employers' welfare institutions, and seventeenth annual report of the bureau of mediation and arbitration; Volume II, Twenty-first annual report of the bureau of labor statistics; Volume III, Eighteenth annual report of the bureau of factory inspection.

**REPORT OF THE COMMISSIONER.**—This consists of a general review of the four distinct lines of work carried on by the State department of labor, viz, the enforcement of the factory and other labor laws (bureau of factory inspection); the adjustment of controversies between employers and employees (bureau of mediation and arbitration); the investigation of industrial conditions (bureau of labor statistics); the bringing together of employers seeking help and workers seeking positions (free employment bureau in New York City).

**FREE EMPLOYMENT BUREAU.**—The work of the State free employment bureau has steadily increased since its establishment in 1897. During the year ending December 31, 1903, there were 6,274 persons who made application for work—3,258 men and 3,016 women. Of the men 1,585 were native born and 1,673 foreign born; 782 were married and 2,476 single; the married men had 916 children, 624 of whom were dependent on them for support. Of the women 1,067 were native born and 1,949 foreign born; 1,493 were married and 1,523 single; the women had 1,464 children, 751 of whom were dependent. During the year 4,717 applications for help were made. There were 4,456 situations (covering 49 trades and vocations) secured—862 by men and 3,594 by women.

**EMPLOYERS' WELFARE INSTITUTIONS.**—The department of labor in 1903 undertook a special inquiry into the subject of industrial betterment. The investigation embraced about 110 establishments, for the



most part in the productive industries, that had in successful operation some of the activities that came within the scope of the research. It was not attempted to include in the inquiry every factory in the State in which welfare work had been inaugurated, as a presentation of detailed information regarding all of them would be but a repetition of the facts relating to those already considered. The measures described typify the character of the effort that is in operation in other establishments.

*Seventeenth Annual Report of the Board of Mediation and Arbitration, for the year ended September 30, 1903. 363 pp.*

This report contains an account of the labor disputes within the State for the year ending September 30, 1903, together with full particulars of the more important disputes within the period, the text of joint trade agreements, proposed legislation on the subject of industrial arbitration, and a reprint of the arbitration laws of the United States, the various States of the Union, and Canada.

During the year ending September 30, 1903, the board of mediation and arbitration collected reports respecting 202 industrial disputes. The number of working people directly involved in these disputes was 100,133, while 18,258 more were thrown out of work as a result of the disputes. The number of working days lost by the workers directly concerned in the disputes was 3,464,391, while those indirectly affected lost 685,653, making a total of 4,150,044 working days lost.

Considering industries, the greatest number of disputes was in the building trades, it being 69, followed by 48 in metals, machinery, etc., 16 in clothing, etc., 14 in paper and pulp, and 12 in textiles. Increase of wages was the cause or object in 89 disputes, trade unionism in 41, reduction of hours in 39, and working arrangements in 13. Of results of disputes, 93 (involving 66,482 strikers) were in favor of employers, 57 (involving 11,936 strikers) were in favor of employees, and 52 (involving 21,715 strikers) were compromised.

The mode of settlement of the disputes reported was as follows :

MODE OF SETTLEMENT OF DISPUTES, YEAR ENDING SEPTEMBER 30, 1903.

Mode of settlement	Number of dis- putes.	Employ- ees in- volved.
Direct negotiations .....	105	64,876
Return to work on employers' terms .....	48	33,125
Replacement of workers .....	27	2,363
Mediation or conciliation .....	8	1,043
Arbitration of trade boards .....	4	6,038
Arbitration of individuals .....	1	7,000
Not reported .....	9	3,946
Total.....	202	118,391



A majority of the disputes (105, involving 64,876 persons) were settled by direct negotiations between the employers and the workmen. In 48 disputes, involving 33,125 persons, the employees returned to work on the employers' terms, while in 27 disputes, involving 2,363 persons, the employees were replaced by other workers.

*Twenty-first Annual Report of the Bureau of Labor Statistics, for the year ended September 30, 1903. 1,125 pp.*

The subjects presented in this report are: Trade unions in 1903, 27 pages; the state of employment, 16 pages; wages and earnings, 23 pages; changes in hours of labor, 8 pages; appendix (statistical tables), 1,031 pages.

TRADE UNIONS.—On September 30, 1903, there existed in the State 2,583 local trade unions and similar labor organizations, the aggregate membership of which was 395,598 working men and women. In the table following is shown the number of organizations and the membership, by sex, in each year from 1894 to 1903:

NUMBER OF TRADE UNIONS AND MEMBERSHIP, BY SEX, 1894 TO 1903.

Date.	Number of unions.	Membership.		
		Men.	Women.	Total.
July 1, 1894 .....	860	149,709	7,488	157,197
July 1, 1895 .....	927	170,129	10,102	180,231
October 31, 1896 .....	962	(a)	(a)	170,296
September 30, 1897 .....	1,009	162,690	5,764	168,454
September 30, 1898 .....	1,087	163,562	7,505	171,067
September 30, 1899 .....	1,320	200,932	8,088	209,020
September 30, 1900 .....	1,635	233,553	11,828	245,381
September 30, 1901 .....	1,871	261,523	14,618	276,141
September 30, 1902 .....	2,229	313,592	15,509	329,101
September 30, 1903 .....	2,583	380,845	14,753	395,598

<sup>a</sup> Not separately reported.

Of the 2,583 trade unions in existence on September 30, 1903, 653 were located in New York City and 1,930 in other cities of the State, while of the 395,598 members, 244,212 belonged to New York City unions and 151,386 to unions in other places. The female members in all trade unions numbered 14,753, of whom 8,297 were in unions in the clothing and textile industries, 2,978 in unions in the tobacco industry, and 1,039 in unions in the printing, binding, etc., industry.



The membership of trade unions, by industries, on July 1 for the years 1894 and 1895; on October 31 for the year 1896, and on September 30 for the years 1897 to 1903 is shown in the table following:

MEMBERSHIP OF TRADE UNIONS, BY INDUSTRIES, 1894 TO 1903.

Industry.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Building, stoneworking, etc .....	49,056	53,613	56,294	53,273	59,641	71,067	80,441	85,401	91,184	110,457
Clothing and textiles .....	39,162	51,921	30,093	32,147	26,433	29,714	28,866	41,883	46,984	40,981
Metals, machinery, and shipbuilding .....	9,860	11,376	13,010	13,991	16,236	24,014	31,271	35,562	51,749	48,230
Transportation .....	18,197	18,191	23,031	23,014	18,090	24,668	30,854	34,371	36,901	61,749
Printing, binding, etc .....	11,059	11,998	13,848	13,313	15,045	16,023	17,117	17,986	21,110	23,845
Tobacco .....	8,722	9,089	9,799	9,097	8,889	8,886	12,349	10,210	11,633	12,435
Food and liquors .....	5,661	6,541	7,503	6,995	6,812	8,391	9,430	9,451	13,371	19,246
Theaters and music .....	5,688	7,327	7,306	6,920	9,346	9,518	9,698	11,688	11,588	11,674
Woodworking and furniture .....	5,329	4,652	4,218	4,205	4,584	6,683	8,176	8,260	11,823	17,126
Restaurants and retail trade .....	1,243	1,529	2,087	1,843	2,174	3,207	5,303	6,804	8,503	10,942
Public employment .....	1,964	1,964	993	1,667	1,880	3,727	7,148	8,142	9,160	9,753
Miscellaneous .....	1,256	2,030	2,114	1,989	1,937	3,122	4,728	6,383	15,095	29,160
Total .....	157,197	180,231	170,296	168,454	171,067	209,020	245,381	276,141	329,101	395,598

The number and membership of trade unions, by industries, for New York City and the State exclusive of New York City, on September 30, 1903, is shown in the following table:

NUMBER AND MEMBERSHIP OF TRADE UNIONS, BY INDUSTRIES, SEPTEMBER 30, 1903.

Industry.	Number of unions in—			Membership of unions in—		
	New York City.	Other localities.	The State.	New York City.	Other localities.	The State.
Building, stoneworking, etc .....	184	495	679	77,510	32,947	110,457
Transportation .....	73	276	349	28,702	33,047	61,749
Clothing and textiles .....	62	119	181	29,290	11,691	40,981
Metals, machinery, and shipbuilding ..	89	271	360	20,723	27,507	48,230
Printing, binding, etc .....	31	85	116	19,463	4,382	23,845
Woodworking and furniture .....	37	53	90	14,125	3,001	17,126
Food and liquors .....	51	107	158	12,777	6,469	19,246
Theaters and music .....	12	39	51	8,667	3,007	11,674
Tobacco .....	16	51	67	8,474	3,961	12,435
Restaurants and retail trade .....	13	115	128	3,985	6,957	10,942
Public employment .....	28	83	111	7,852	1,901	9,753
Stationary engine tending .....	28	67	95	6,613	4,553	11,166
Miscellaneous .....	29	169	198	6,031	11,963	17,994
Total .....	653	1,930	2,583	244,212	151,386	395,598

**THE STATE OF EMPLOYMENT.**—This chapter brings out the proportion of trade-union members belonging to the various industries not at work at the end of each month during 1903 and the causes of idleness. During the first quarter of 1903 the proportion of trade-union members not at work fell to 5.6 per cent as compared with 6.2 per cent in 1902; but in consequence of labor disputes, chiefly in the building trades in New York City, the conditions of employment at the end of the year were on the whole less favorable than in 1902.

Returns from 184 representative trade unions, including in their membership more than 100,000 wage-earners in about 85 different industries, showed that the mean proportion of idle members in 1903 was 17.5 as compared with 14.8 in 1902. The number in these 184



unions idle on account of strikes and lockouts steadily increased from 1,086 at the end of February to 15,983 at the end of June. Thereafter the number rendered idle by such controversies gradually decreased.

The number of members of trade unions idle, by causes of idleness, at two periods (end of March and end of September) during the years 1902 and 1903, is shown in the table below:

MEMBERS OF TRADE UNIONS IDLE, BY CAUSES OF IDLENESS, IN 1902 AND 1903.

Cause of idleness.	End of March, 1902.		End of September, 1902.		End of March, 1903.		End of September, 1903.	
	Number idle.	Per cent.	Number idle.	Per cent.	Number idle.	Per cent.	Number idle.	Per cent.
Lack of work .....	23,667	64.5	10,430	56.8	23,997	57.2	18,528	53.9
The weather .....	<sup>a</sup> 8,168	<sup>a</sup> 22.2	<sup>a</sup> 2,309	<sup>a</sup> 12.6	8,550	20.4	677	2.0
Strike or lockout .....	1,051	2.8	2,301	12.5	4,470	10.7	10,153	29.5
Lack of material .....	(b)	(b)	(b)	(b)	534	1.3	852	2.5
Disability .....	2,446	6.7	2,279	12.4	3,344	8.0	1,993	5.8
Other reasons .....	1,281	3.5	981	5.3	905	2.1	2,010	5.8
Reason not stated .....	97	.3	81	.4	141	.3	157	.5
Total .....	36,710	100.0	18,381	100.0	41,941	100.0	34,370	100.0

<sup>a</sup> Including number idle on account of lack of material.

<sup>b</sup> Included in number idle on account of the weather.

At the end of March, 1903, there were 15,114 members of trade unions idle in the building, stoneworking, etc., industries; 7,817 in transportation; 8,531 in clothing and textiles, and 1,920 in metals, machinery, etc. At the end of September, 1903, there were 11,116 members idle in the building, stoneworking, etc., industries; 2,082 in transportation; 6,207 in clothing and textiles, and 4,467 in metals, machinery, etc.

**WAGES AND EARNINGS.**—This chapter presents changes in rates of wages, the number of working people affected by these changes, and average daily and average quarterly earnings as reported by manufacturers and by members of labor organizations. In the twelve months ending September 30, 1903, 65,182, or 16.5 per cent of the members of trade unions in the State on September 30, 1903, received an increase in wages averaging \$1.81 a week for each member affected, while 394 sustained a decrease in weekly wages averaging 54 cents each. However, only 34 of these suffered a decrease in the actual rate of wages, the decline in earnings of the others having been brought about through a shortening of the hours of work. Manufacturers reported changes for 19,206 employees, or 2.2 per cent of the wage-earners in their employ, averaging \$1.23 increase per week for each. Owing to a shortening of the hours of work, 75 employees suffered a decrease in weekly earnings. Eliminating duplications, it is estimated that 81,205 workers (organized and unorganized) received wage increases aggregating \$137,283.45 per week, or an average weekly increase of \$1.69.

The total net increase reported by trade unions in 1903 amounted to \$117,450 a week, which, divided among the 357,102 members, at the



middle of the year amounted to a weekly advance of 33 cents each. The average earnings of the organized men and women, by industries, for six months of 1903, are set forth in the following table:

AVERAGE EARNINGS OF ORGANIZED WORKING PEOPLE, BY INDUSTRIES, FOR SIX MONTHS OF 1903.

Industry.	Average earnings of men, 1903.			Average earnings of women, 1903.		
	First quarter.	Third quarter.	Six months.	First quarter.	Third quarter.	Six months.
Building, stoneworking, etc.....	\$192.33	\$210.78	\$403.11			
Transportation.....	184.71	177.63	362.34	\$101.25	\$100.07	\$201.32
Clothing and textiles.....	149.18	147.20	296.38	87.15	97.31	184.46
Metals, machinery, etc.....	195.71	193.33	389.04	106.88	87.80	194.68
Printing, binding, etc.....	224.42	220.08	444.50	114.43	112.86	227.29
Woodworking and furniture.....	187.89	184.81	372.70	101.80	117.83	219.63
Food and liquors.....	168.02	183.78	351.80	64.49	65.33	129.82
Theaters and music.....	263.67	303.85	567.52	382.11	378.14	760.25
Tobacco.....	134.38	145.22	279.60	114.63	122.84	237.47
Restaurants and retail trade.....	154.54	155.44	309.98	89.09	85.38	174.47
Public employment.....	198.55	207.11	405.66	88.85	71.24	160.09
Stationary engine tending.....	225.04	214.00	439.04			
Miscellaneous.....	149.20	133.72	282.92	69.69	122.70	192.39
Total.....	186.35	189.96	376.31	115.89	112.49	228.38

CHANGES IN HOURS OF LABOR.—During the year ending September 30, 1903, the unions reported changes in the normal working time of 21,978 organized wage-earners. The changes were mostly in the nature of reductions in the weekly hours of labor, but there were some cases of an increase. Of this number an average reduction of 5.2 hours in the weekly schedule was made, affecting 21,636 working people, while the remaining 342 had their weekly schedule increased by an average of 8.5 hours. The following table shows, by industries, the changes in hours per week and the number of organized workers affected:

CHANGES IN WEEKLY HOURS OF LABOR OF MEMBERS OF LABOR ORGANIZATIONS AND MEMBERS AFFECTED, AS REPORTED BY LABOR UNIONS FOR THE YEAR ENDING SEPTEMBER 30, 1903.

Industry.	Decrease per week.			Increase per week.			Net change per week.		
	Mem- bers af- fected.	Total hours.	Aver- age hours.	Mem- bers af- fected.	Total hours.	Aver- age hours.	Mem- bers af- fected.	Total de- crease of hours.	Aver- age de- crease of hours.
Building, etc.....	7,176	36,022	5.0	93	638	6.9	7,269	35,384	4.9
Transportation.....	1,668	15,292	9.2				1,668	15,292	9.2
Clothing and tex- tiles.....	5,032	18,412	3.7				5,032	18,412	3.7
Metals, machines, etc.....	3,706	16,839	4.5	81	97	1.2	3,787	16,742	4.4
Printing.....	127	492	3.9				127	492	3.9
Woodworking.....	1,505	9,081	6.0				1,505	9,081	6.0
Food and liquors.....	233	2,518	10.8				233	2,518	10.8
Tobacco.....	26	232	9.0				26	232	9.0
Restaurants and retail trade.....	499	4,375	8.8				499	4,375	8.8
Public employ- ment.....	6	18	3.0				6	18	3.0
Stationary engine tending.....	35	839	24.0				35	839	24.0
Miscellaneous.....	1,623	8,750	5.4	168	2,184	13.0	1,791	6,566	3.7
Total.....	21,636	112,870	5.2	342	2,919	8.5	21,978	109,951	5.0



About one-half of the workers who in 1903 gained a reduction in the hours of labor were New York City unionists, three movements being especially conspicuous, viz, (1) the extension of the Saturday half holiday (reduction of hours from 48 to 44 per week) to some 4,000 workmen in the building and allied trades; (2) the establishment of the 8-hour day for 2,525 clothing cutters and trimmers; (3) the establishment of the 9-hour day for nearly 5,000 workmen belonging to various trades. Of the total 21,636 organized workers in the State who gained a reduction in hours of labor, 5,833, or 27 per cent, secured the 8-hour day. The largest number of workmen in any one trade securing a shorter working day was 2,627 clothing cutters, all but 102 of whom were in New York City. Women to the number of 1,237 (chiefly garment workers in New York City) were benefited by the reductions in hours in 1903.

### NORTH CAROLINA.

*Eighteenth Annual Report of the Bureau of Labor and Printing of the State of North Carolina, for the year 1904.* H. B. Varner, Commissioner. 246 pp.

The nine chapters constituting this report treat of the following subjects: Agricultural statistics, 46 pages; miscellaneous factories, 29 pages; cotton and woolen mills, 33 pages; furniture factories, 14 pages; newspapers, 43 pages; trades, 33 pages; telephone industry, 8 pages; mining industry, 9 pages; railroad employees, 9 pages. In connection with several of these subjects letters are published expressing the views of the correspondents of the bureau on matters of interest to labor, including compulsory education, child labor, effect of education on negro labor, etc.

AGRICULTURAL STATISTICS.—Returns were secured by correspondence with representative farmers in every county of the State, and from the compiled returns the following summary is taken: In 92 counties labor was reported scarce, and in 5 plentiful; 96 counties reported negro labor unreliable, and 1 reliable; in 42 counties employment was reported as being regular, and in 55 as being irregular. Increased cost of living was reported in 95 counties, and no increase in 2; in 81 counties increase of wages was reported, and in 16 no increase. Monthly wages of farm laborers were: For men, from \$11.07 to \$18.86; for women, \$6.16 to \$11.54; for children, an average of \$5.50.

MISCELLANEOUS FACTORIES.—Tables are presented showing conditions in 203 factories (199 employing 7,655 persons), exclusive of furniture factories and textile mills. Capital stock, horsepower, time in operation, hours of labor, wages, number of employees, etc., are shown for the various establishments, and inquiry was also made as to child labor and compulsory education. The length of a day's



work in most factories was ten hours; \$2.09 was the highest and \$0.84 the lowest daily wages reported. Wages were paid weekly in 58 per cent of the factories, monthly in 20 per cent, semimonthly in 19 per cent, daily in 2 per cent, and semiweekly in 1 per cent; 134 factories reported an increase of wages, 1 a decrease, and 56 no change; 118 factories reported 17,063 persons dependent on them for a livelihood; 84 per cent of adult employees and 92 per cent of children could read and write.

**COTTON AND WOOLEN MILLS.**—This report covers 304 mills, operating 2,178,964 spindles, 48,612 looms; and 3,477 knitting machines, using in all 80,064 horsepower. The number of employees was 57,555; an average of  $10\frac{4}{5}$  hours constituted a day's work; the highest average wages per day for operatives were \$2.13 for men and \$1.04 for women; the lowest average wages per day were \$0.62 for men and \$0.49 for women; the wages of children averaged \$0.41 per day; 85 per cent of adult employees and 78 per cent of children could read and write.

**FURNITURE FACTORIES.**—Returns were received from 86 factories, 85 of them employing 4,847 work people. The highest average daily pay for adults was \$2.05; the lowest, \$0.73; the pay of children, \$0.39. Of the factories reporting, 80 per cent paid semimonthly, 14 per cent weekly, 5 per cent monthly, and 1 per cent did not report that item; 86 per cent reported increase of wages and 14 per cent no increase. Of adult employees, 82 per cent were able to read and write, and of children 91 per cent. Relative to the employment of children under 14 years of age, 83 per cent of the manufacturers opposed such employment, while 17 per cent favored it; 91 per cent favored compulsory education and 9 per cent opposed it.

**TRADES.**—The facts presented in this chapter were secured from representative men in the different trades, and give the conditions existing throughout the State. Of the wage-earners making returns, 29 per cent reported an increase of wages, and 8 per cent a decrease, the remaining 63 per cent either not reporting or reporting no change; 63 per cent made full time and 37 per cent part time; 85 per cent reported cost of living increased and 15 per cent no increase; 21 per cent favored an 8-hour day, 9 per cent a 9-hour day, 65 per cent a 10-hour day, and 5 per cent an 11-hour day; 89 per cent favored fixing a day's work by law and 11 per cent opposed it; 87 per cent favored compulsory education and 13 per cent opposed it.

**TELEPHONE AND MINING INDUSTRIES.**—Statistics of employees, wages, extent and value of business done, etc., in these industries are reproduced from various State and Government reports.

**RAILROAD EMPLOYEES.**—The number of railroad employees in the State in 1904 was reported at 12,788, exclusive of officers and office employees. The table following gives number of employees and average wages for the various occupations.



## OCCUPATIONS AND AVERAGE DAILY WAGES OF RAILROAD EMPLOYEES, 1904.

Occupation.	Number.	Average daily wages.	Occupation.	Number.	Average daily wages.
Station agents.....	617	\$1.12	Carpenters.....	437	\$1.71
Other station men .....	1,754	.82	Other shopmen .....	1,551	1.13
Engineers .....	566	2.83	Section foremen .....	551	1.41
Firemen .....	643	1.34	Other trackmen .....	3,449	.85
Conductors.....	366	2.40	Switch, flag, and watch men	466	1.13
Other trainmen .....	951	1.06	Telegraph operators .....	322	1.79
Machinists .....	377	2.39	Other employees .....	738	1.20

During the year 39 employees were killed and 460 injured, resulting from the movement of trains, and 1 killed and 484 injured from other causes than the movement of trains.

## OHIO.

*Twenty-eighth Annual Report of the Bureau of Labor Statistics of the State of Ohio for the year 1904.* M. D. Ratchford, Commissioner. 655 pp.

The subjects presented in this report are as follows: Laws governing the labor bureau and recent Ohio laws and court decisions relating to labor, 48 pages; manufactures, 354 pages; coal mining, 213 pages; free public employment offices, 20 pages; list of bureaus of labor in the United States, 2 pages.

MANUFACTURES.—Statistics for 1903 are given, showing, by industries, the number of establishments reported, capital invested, value of goods manufactured, amount paid for rent, taxes, and insurance, amount paid in wages, number employed and salaries of office help, number of males and females employed each month, and monthly average of males and females; also, by occupations, the number employed, average number of days worked during the year, average daily wages, average yearly earnings, and average hours of daily labor. Other tables show, by industries, the number in each occupation affected by a change in wages during the year. The statistics are shown for each of the five principal cities, for the remaining cities and villages, and by totals for the State. Comparisons between summaries for 1902 and 1903 are also made.

The 7,961 manufacturing establishments from which returns were received for 1903 had an invested capital of \$385,895,325, and produced or manufactured goods to the value of \$759,039,559. Wages to the amount of \$172,485,278 were paid to 343,859 employees—290,217 males and 53,642 females. During the year there were 62,537 persons who received an average advance in wages of 7.9 per cent, while 4,267 persons suffered an average reduction of 6.5 per cent.

The summary following presents for 1903 the principal data for ten of the leading industries:



## STATISTICS OF MANUFACTURES, 1903.

Industry.	Estab- lish- ments.	Capital invested.	Value of product.	Employ- ees.	Wages paid.
Boilers, engines, and tanks .....	126	\$14,396,156	\$23,040,836	12,480	\$6,946,383
Boots and shoes .....	61	3,962,527	23,632,919	14,543	5,073,942
Clothing .....	767	3,803,343	31,334,286	16,358	7,415,505
Flouring-mill products .....	381	6,478,132	33,708,730	3,012	1,426,683
Foundry and machine-shop products .....	334	20,264,119	56,808,781	30,890	17,059,327
Liquors (malt and distilled) .....	148	30,658,342	27,860,715	4,669	3,112,755
Machinery .....	249	21,919,920	41,064,074	21,087	12,299,745
Printing and binding .....	640	13,980,798	15,694,229	10,641	5,015,975
Sash, doors, lumber, and interior finish ..	375	6,144,393	18,080,949	8,086	4,095,635
Steel, iron, and tin .....	94	43,460,013	114,355,562	37,875	24,057,614

COAL MINING.—Under this head are presented, for 1903, statistics relative to the production of coal. The reports received from the various mines are summarized in the statement following:

Mines reporting .....	575
Capital invested .....	\$32,854,018
Value of product .....	\$28,135,893
Total number of work people (exclusive of salaried employees) .....	38,671
Average number of work people (monthly) .....	36,460
Amount paid in wages .....	\$19,113,467
Average days worked during year .....	191
Average hours worked per day .....	8
Average yearly earnings .....	\$496.60
Average daily wages .....	\$2.60
Number receiving advance in wages .....	26,950
Average per cent of advance in wages .....	12.57

FREE PUBLIC EMPLOYMENT OFFICES.—Brief text reports from the superintendents of the five offices, tables showing the work done by each office from the date of its organization, and reports of the operations of each office for each month of the year ending October 27, 1904, with totals for the year, are found under this head.

The following table shows the operations of the five free public employment offices of the State for the year ending October 27, 1904:

OPERATIONS OF FREE PUBLIC EMPLOYMENT OFFICES, YEAR ENDING  
OCTOBER 27, 1904.

City.	Situations wanted.		Help wanted.		Positions secured.	
	Males.	Females.	Males.	Females.	Males.	Females.
Cleveland .....	1,731	1,960	1,293	2,101	985	1,670
Columbus .....	1,479	1,976	1,646	2,811	1,397	1,779
Cincinnati .....	1,750	2,464	1,270	2,847	1,247	2,098
Dayton .....	2,322	2,303	2,097	4,960	2,010	2,178
Toledo .....	2,098	1,126	1,907	1,623	1,354	845
Total .....	9,380	9,829	8,213	14,342	6,993	8,570



Since the organization in 1890 of the five free public employment offices there has been a total of 384,091 applications for situations wanted, 325,794 applications for help wanted, and 220,855 positions secured. Of applications for situations 57.5 per cent were filled, and of applications for help wanted 67.8 per cent were filled.

The expenses of the five offices for the year ending October 31, 1904 (excluding salaries), were \$2,410.04, of which the expenses of the Cleveland office were \$483.42, the Columbus office \$472.25, the Cincinnati office \$494.40, the Dayton office \$449.53, and the Toledo office \$510.44.



## RECENT FOREIGN STATISTICAL PUBLICATIONS.

### AUSTRIA.

*Die Arbeitervereine in Österreich nach dem Stande vom 31 Dezember 1900 samt den in diesem Stande bis Ende 1904 vorgefallenen Veränderungen.* Herausgegeben vom K. K. arbeitsstatistischen Amte im Handelsministerium, 1905. I Band. Tabellarischer Teil. 67\*, 689 pp.

This report gives the results of a comprehensive inquiry relative to the development, membership, and operations of the workingmen's organizations in Austria, conducted by the Austrian bureau of labor statistics in pursuance of a suggestion made by the commission of Austrian trade unions in 1899, and embraces in its scope all workingmen's organizations of a nonpolitical character in operation on December 31, 1900. In the prosecution of its work the bureau adopted every means at its command, through schedules of inquiry, the cooperation of provincial authorities, and otherwise, to secure the data bearing upon the subject under investigation, the information being obtained from officers of workingmen's organizations and others in a position to aid in the work.

This volume, which constitutes the first part of the entire report, contains: (1) The introduction, explaining the methods pursued in the inquiry and the disposition of the material collected by the bureau; (2) copies of the schedules of inquiry used and of the instructions issued for properly filling out the schedules; (3) a comprehensive analysis and summarized statements of the tables; and (4) a series of tables giving in detail the results of the investigation.

On December 31, 1900, there were 6,931 registered workingmen's organizations in the provinces represented in the Austrian Parliament. These were grouped according to their aims and purposes into the following classes: (1) General unions, including all organizations of a general character as implied by their title, or which, according to their objects and purposes or characteristic features as disclosed by their by-laws, could not be placed in any of the other classes; (2) educational unions, embracing all organizations for the promotion of the intellectual improvement of their members; (3) social unions, including those organizations whose object was to foster sociability, physical culture, and the artistic taste; (4) trade unions, including all organizations which, as a rule, admit as regular members only persons pursuing the same trade or occupation, and which seek the intellectual and material improvement of their members; (5)



relief societies, including organizations for giving material assistance to their members; (6) economic societies, embracing all organizations for the improvement of the material welfare of their members by means of cooperation.

Of these 6,931 registered workingmen's organizations, 1,490, or 21 per cent, were general unions; 1,278, or 18 per cent, were educational unions; 470, or 7 per cent, were social unions; 2,343, or 34 per cent, were trade unions proper; 802, or 12 per cent, were relief societies, and 548, or 8 per cent, were economic societies. The development of workingmen's organizations in Austria is a feature of comparatively recent years. Of 4,577 unions or societies which on December 31, 1900, reported the date of organization, 216, or 5 per cent, were organized prior to 1871, while 1,102, or 24 per cent, were organized from 1891 to 1895, and 2,486, or 54 per cent, from 1896 to 1900. These facts are brought out in detail in the following table, showing kind and number of unions, according to date of organization:

KIND AND NUMBER OF WORKINGMEN'S UNIONS ACCORDING TO DATE OF ORGANIZATION.

Kind of union.	Date of organization.						Total.
	Prior to 1871.	1871 to 1880.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896 to 1900.	
General unions .....	60	22	35	58	217	559	951
Educational unions .....	19	32	19	62	284	386	802
Social unions .....	5	8	10	28	66	217	334
Trade unions .....	33	38	38	71	382	1,029	1,591
Relief societies .....	80	134	76	65	72	131	558
Economic societies .....	19	26	16	35	81	164	341
Total .....	216	260	194	319	1,102	2,486	4,577

**MEMBERSHIP.**—Of the 6,931 registered workingmen's organizations, 4,729, or 68.2 per cent, made complete returns in regard to their membership, financial operations, etc. The total membership of all organizations making returns on December 31, 1900, was 907,794, including 44,649 honorary members. Of the total number, 758,924, or 84 per cent, were males and 148,870, or 16 per cent, females. The average membership per union was 192. On this basis the total membership of all registered workingmen's organizations was, in round numbers, 1,300,000. The total number of wageworkers reported in Austria in 1900 was 5,268,693. According to this estimate, therefore, about one-fourth of the wageworkers were members of registered labor organizations. This proportion, however, is too large, because many individuals were members of two or more organizations. In the following table a presentation by provinces is given in absolute and relative figures, showing the number of organizations making returns, their membership, and the average membership per organization on December 31, 1900:



## ORGANIZATIONS MAKING RETURNS, MEMBERSHIP, AND AVERAGE MEMBERSHIP PER ORGANIZATION, BY PROVINCES, DECEMBER 31, 1900.

Province.	Organizations.		Membership.		Average membership per organization.
	Number.	Per cent.	Number.	Per cent.	
Lower Austria .....	820	17.3	316,054	34.8	385
Upper Austria .....	204	4.3	51,683	5.7	253
Salzburg .....	63	1.3	10,387	1.1	165
Styria .....	309	6.5	92,612	10.2	300
Carinthia .....	54	1.1	16,340	1.8	303
Carniola .....	56	1.2	7,917	.9	141
Istria .....	78	1.7	21,499	2.4	276
Tyrol and Vorarlberg .....	218	4.6	39,409	4.3	181
Bohemia .....	2,168	45.9	211,158	23.3	97
Moravia .....	484	10.2	90,786	10.0	188
Silesia .....	132	2.8	30,480	3.4	231
Galicia .....	127	2.7	17,077	1.9	134
Bukowina .....	9	.2	1,110	.1	123
Dalmatia .....	7	.2	1,282	.1	183
Total .....	4,729	100.0	907,794	100.0	192

The foregoing table shows that the greatest number of organizations was found in Bohemia, where they represented 45.9 per cent of the total number in Austria, with an average membership per organization, however, of only 97, in marked contrast with an average membership of 385 in Lower Austria. The low average for Bohemia is attributed to the numerous small trade unions found even in the smallest industrial centers, where the membership is naturally limited to few members, while the high average for Lower Austria is attributed to the highly developed benefit and economic societies and to the fact that this province includes the city of Vienna. Lower Austria had the largest union membership of any of the provinces.

The following table shows the membership of the trade unions, the general and educational unions, and the relief societies, grouped according to industries:

## MEMBERSHIP OF TRADE UNIONS, GENERAL AND EDUCATIONAL UNIONS, AND RELIEF SOCIETIES MAKING RETURNS, BY INDUSTRIES, DECEMBER 31, 1900.

Industry.	Membership of—			Total.
	Trade unions.	General and educational unions.	Relief societies.	
Agriculture, forestry, and gardening .....	3,368	4,239	2,208	9,887
Mining and smelting .....	10,657	5,419	5,267	21,343
Stone, clay, and glass .....	11,438	1,809	3,131	16,378
Metals, machinery, instruments, etc .....	19,805	5,060	26,487	51,352
Wooden goods .....	10,173	3,824	4,720	18,717
Paper, leather, rubber, etc .....	8,698	896	2,556	12,150
Textiles .....	7,968	7,074	22,146	37,188
Clothing .....	11,153	5,968	5,570	22,691
Food and beverages (a) .....	11,780	1,465	3,083	16,328
Chemicals .....	512	130	400	1,042
Building trades .....	4,926	2,686	4,377	<sup>b</sup> 11,993
Printing, etc .....	14,316	598	6,578	21,492
Commercial employment .....	8,109	703	3,246	12,058
Transportation .....	21,032	1,278	31,550	53,860
Domestic service .....	2,275	1,726	7,789	11,790
Musicians .....	1,594	-----	-----	1,594
Total .....	147,804	42,875	129,180	<sup>b</sup> 319,863

<sup>a</sup> Including hotel and saloon employees.

<sup>b</sup> The sum of the items does not equal this total, but the figures are here reproduced as found in the original.



Considering the organizations by groups according to the size of their membership, it is found that the largest number is represented by the group having a membership ranging between 26 and 50; the next largest number is found in the group having a membership of 51 to 100, while 12 unions had a membership of over 5,000. These facts are brought out in detail in the following table, which gives the kind and number of organizations, grouped according to the size of their membership:

KIND AND NUMBER OF ORGANIZATIONS, GROUPED ACCORDING TO SIZE OF MEMBERSHIP, DECEMBER 31, 1900.

Kind of organization.	Number of organizations reporting.	Number of organizations with a membership of—										
		25 or less.	26 to 50.	51 to 100.	101 to 200.	201 to 500.	501 to 1,000.	1,001 to 2,000.	2,001 to 3,000.	3,001 to 4,000.	4,001 to 5,000.	Over 5,000.
General unions.....	949	104	235	288	216	95	10	1	-----	-----	-----	-----
Educational unions.....	812	141	300	226	99	38	6	2	-----	-----	-----	-----
Social unions.....	337	70	116	100	38	7	3	2	1	-----	-----	-----
Trade unions.....	1,671	405	509	365	231	132	23	4	1	1	-----	-----
Relief societies.....	563	25	62	107	145	124	54	22	6	3	5	10
Economic societies.....	343	38	40	58	78	79	33	11	1	2	1	2
Total .....	4,675	783	1,262	1,144	807	475	129	42	9	6	6	12

As previously stated the total membership of all organizations on December 31, 1900, which furnished returns, was 907,794. Of this number 758,924, or 84 per cent, were males and 148,870, or 16 per cent, were females, while of the total number of wageworkers in Austria the males constituted 70 per cent and the females 30 per cent of the total. The largest proportion of female members was found in the relief societies while the smallest was found in the trade unions, their membership in the former representing 23 per cent and in the latter only 4 per cent. These facts are brought out more clearly in the two tables following, which give the distribution of membership by sex, first for all kinds of organizations, and second, by industries, for the trade unions only:

KIND AND MEMBERSHIP OF ORGANIZATIONS MAKING RETURNS, BY SEX, DECEMBER 31, 1900.

Kind of organization.	Males.		Females.		Total.
	Number.	Per cent.	Number.	Per cent.	
General unions .....	87,787	89	10,847	11	98,634
Educational unions .....	53,212	87	7,798	13	61,010
Social unions .....	25,652	95	1,412	5	27,064
Trade unions .....	141,637	96	6,167	4	147,804
Relief societies .....	354,157	77	106,018	23	460,175
Economic societies .....	96,479	85	16,628	15	113,107
Total .....	758,924	84	148,870	16	907,794



## MEMBERSHIP OF TRADE UNIONS, BY SEX AND INDUSTRY, DECEMBER 31, 1900.

Industry.	Males.		Females.		Total.
	Number.	Per cent.	Number.	Per cent.	
Agriculture.....	2,780	86	436	14	3,216
Glass, clay, and china ware.....	7,602	90	825	10	8,427
Textiles.....	6,871	86	1,097	14	7,968
Clothing.....	9,853	94	604	6	10,457
Paper.....	1,314	82	285	18	1,599
Bookbinding.....	1,297	79	342	21	1,639
Tobacco.....	272	50	277	50	549
Printing, etc.....	13,638	95	678	5	14,316
Domestic service.....	1,511	74	532	26	2,043
All other.....	96,499	99	1,091	1	97,590
Total.....	141,637	96	6,167	4	147,804

ENTRANCE FEES AND MEMBERSHIP DUES.—Of the 6,931 registered workingmen's organizations, 4,300 reported on the subject of entrance fees, of which 182 required no fee, 3,383 provided for the payment of uniform rates, and in 735 unions the rates varied according to the age or sex of the member, benefit, or relief allowances, etc. In the majority of organizations providing for the payment of uniform entrance fees the rates ranged from 21 to 60 heller (4.3 to 12.2 cents), with 40 heller (8.1 cents) the predominating rate. The largest number of organizations requiring uniform entrance fees of over 5 kronen (\$1.02) were found among the trade unions, including 55 typographical unions with a uniform rate of 6 kronen (\$1.22). In the case of organizations charging various entrance fees, the highest rates were found among the relief societies, reaching in some instances as high as 80 and 90 kronen (\$16.24 and \$18.27).

Of 4,307 organizations reporting the membership dues, it was found that in 3,076 a uniform rate prevailed, in 1,228 the dues varied, generally according to the same conditions which regulated the payment of entrance fees, while in 3 no payment of membership dues was required. The greater number of organizations in which the membership dues were uniform required a monthly payment ranging from 11 to 30 heller (2.2 to 6.1 cents), with 20 heller (4.1 cents) the predominating rate. In trade unions and relief societies the dues were usually higher than in the other classes of organizations. The highest dues in organizations providing for the payment of uniform rates were 1.50 kronen (30.5 cents) in cases of weekly payments, 2 kronen (40.6 cents) in cases of monthly payments, and 22 kronen (\$4.47) in cases of yearly payments. In the organizations which required dues varying according to the age or sex of the member, benefit allowances, etc., the rates varied within narrow limits. For instance, in the largest group shown in the table which follows there were 230 organizations, each of which required weekly dues ranging from 31 to 40 heller (6.3 to 8.1 cents). The highest rates in these organizations amounted to about 1 krone (20.3 cents) in cases of weekly payments



and 8 kronen (\$1.62) in cases where payments were made by the month.

In the following table the figures relating to membership dues are presented in detail, classified according to the kind of organization:

MEMBERSHIP DUES OF ORGANIZATIONS MAKING RETURNS, BY KIND OF ORGANIZATION, DECEMBER 31, 1900.

*Organizations requiring membership dues of uniform rates to each member.*

Kind of organization.	Per week.					Per month.					Per year.			
	\$0.020 or less.	\$0.022 to \$0.041	\$0.043 to \$0.061	\$0.063 to \$0.102	Over \$0.102	\$0.020 or less.	\$0.022 to \$0.061	\$0.063 to \$0.122	\$0.124 to \$0.203	Over \$0.203	\$0.102 or less.	\$0.104 to \$0.203	\$0.205 to \$0.406	Over \$0.406
General .....	58	28	1	4	-----	90	473	139	9	-----	8	14	13	2
Educational ..	32	12	6	-----	-----	80	431	119	23	1	5	12	2	2
Social .....	21	27	1	-----	-----	10	116	107	6	-----	3	2	9	4
Trade .....	31	213	67	35	57	25	75	124	186	20	2	-----	5	34
Relief .....	16	36	16	12	2	4	55	114	50	13	-----	1	6	7
Total ..	158	316	91	51	59	209	1,150	603	274	34	18	29	35	49

*Organizations requiring membership dues varying according to the age or sex of the member, benefit allowances, etc.*

Kind of organization.	Per cent of earnings.	Per week.						Per month.					
		\$0.041 or less.	\$0.043 to \$0.061	\$0.063 to \$0.081	\$0.083 to \$0.122	\$0.124 to \$0.162	Over \$0.162	\$0.041 or less.	\$0.043 to \$0.081	\$0.083 to \$0.122	\$0.124 to \$0.203	\$0.205 to \$0.406	Over \$0.406
General .....	-----	17	31	1	-----	-----	-----	18	16	8	3	-----	-----
Educational ..	-----	3	3	1	-----	-----	-----	13	45	10	5	-----	-----
Social .....	-----	7	-----	-----	-----	-----	-----	4	13	1	-----	-----	-----
Trade .....	2	178	182	222	141	7	3	1	23	11	42	2	-----
Relief .....	-----	11	5	6	36	66	9	1	6	37	14	11	13
Total .....	2	216	221	230	177	73	12	37	103	67	64	13	13

Of the organizations making returns concerning dues and entrance fees 688 reported additional payments for special purposes. These payments were either obligatory upon the members or voluntary on their part, and were made for the purpose of covering the expenses of delegates or to provide funds for relief in special cases of unemployment, sickness, death, etc.

**BENEFIT FEATURES.**—Of the 4,729 organizations which made returns to the bureau in 1900, 686 were economic and social organizations, which from their nature paid no benefits. Of the remaining 4,043 organizations, comprising the classes which customarily offer relief to their members, 3,478 reported benefits of various kinds and 565 reported no provision for the payment of benefits. The following table shows the number of organizations of each class paying each kind of benefit and the per cent which this number was of the total organizations in that class, whether paying benefits or not:



NUMBER AND PER CENT OF ORGANIZATIONS WHICH PAID BENEFITS IN 1900,  
GROUPED ACCORDING TO THEIR CLASS, BY KIND OF BENEFIT.[The percentages in this table are based on the total number of organizations in each class,  
whether paying benefits or not.]

Kind of benefit.	General unions.		Educational unions.		Trade unions.		Relief societies.		Total organizations.	
	Number.	Per cent of 954 unions.	Number.	Per cent of 815 unions.	Number.	Per cent of 1,707 unions.	Number.	Per cent of 567 societies.	Number.	Per cent of 4,043 organizations.
Unemployment.....	247	26	122	15	1,192	70	11	2	1,572	39
Traveling.....	470	49	304	37	1,244	73	46	8	2,064	51
Removal.....	10	1	5	1	247	14	2	0.4	264	7
Sickness.....	435	46	321	39	377	22	471	83	1,604	40
Invalidity and old age.	66	7	14	2	102	6	83	15	265	7
Death.....	259	27	197	24	238	14	454	80	1,148	28
Widows.....	27	3	44	5	72	4	65	11	208	5
Orphans.....	12	1	25	3	75	4	43	8	155	4
Children of living members.....	37	4	14	2	1	0.1	-----	-----	52	1
Emergency.....	225	24	142	17	889	52	232	41	1,488	37
Legal protection.....	214	22	97	12	1,376	81	29	5	1,716	42

It appears from the foregoing table that 2,064 organizations paid traveling benefits, 1,716 paid benefits for legal protection, 1,604 paid sick benefits, 1,572 paid unemployment benefits, 1,488 paid emergency benefits and 1,148 paid death benefits; old age and invalidity benefits were paid by 265 organizations, removal benefits by 264, widows' benefits by 208, orphans' benefits by 155, and benefits for children of living members by 52. Of all organizations reporting on the subject, 16 per cent maintained but one class of benefits, 24 per cent maintained two classes of benefits, 29 per cent three classes of benefits, 15 per cent four classes of benefits, 11 per cent five classes of benefits, 2 per cent six classes of benefits, and 3 per cent seven or more classes of benefits.

The total number of persons or cases relieved during the year was 243,416. Sick benefits were paid to 173,606 persons, traveling benefits to 29,809, unemployment benefits to 12,632, emergency benefits to 8,747, and invalidity and old-age benefits to 2,681. Death benefits were granted in 7,618 cases, and legal protection was given in 3,299 cases. Relief was also allowed to 1,869 children of living members, to 1,384 widows, and to 1,341 orphans, and 430 persons were assisted in the form of removal benefits.



The following table shows the number of persons entitled to benefits, and the number receiving assistance in 1900:

NUMBER OF PERSONS OR CASES RELIEVED AND THEIR PERCENTAGE OF THE NUMBER OF PERSONS ENTITLED TO EACH CLASS OF BENEFITS, GROUPED ACCORDING TO CLASS OF ORGANIZATION, BY KIND OF BENEFIT, 1900.

[In addition to the relief specified in this table, assistance was given to 1,384 widows, 1,341 orphans, and 1,869 children of living parents.]

Kind of benefit.	General unions.			Educational unions.			Trade unions.		
	Persons entitled to benefits.	Persons or cases relieved.		Persons entitled to benefits.	Persons or cases relieved.		Persons entitled to benefits.	Persons or cases relieved.	
		Num-ber.	Per cent of per-sons en-titled to bene-fits.		Num-ber.	Per cent of per-sons en-titled to bene-fits.		Num-ber.	Per cent of per-sons en-titled to bene-fits.
Unemployment .....	28,076	856	3.0	10,907	568	5.2	100,686	11,035	11.0
Traveling .....	52,240	10,431	20.0	24,302	2,517	10.4	92,176	14,513	15.7
Removal .....	644	18	2.8	338	4	1.2	21,211	391	1.8
Sickness .....	52,566	3,736	7.1	29,954	4,151	13.9	41,040	7,471	18.2
Invalidity and old age .....	10,644	15	.1	1,762	35	2.0	14,266	316	2.2
Death .....	34,101	375	1.1	20,545	317	1.5	32,711	498	1.5
Emergency .....	26,855	546	2.0	12,747	270	2.1	90,311	3,535	3.9
Legal protection .....	21,912	353	1.6	9,948	97	1.0	113,489	1,751	1.5

Kind of benefit.	Relief societies.			Total organizations.		
	Persons entitled to benefits.	Persons or cases relieved.		Persons entitled to benefits.	Persons or cases relieved.	
		Num-ber.	Per cent of per-sons en-titled to bene-fits.		Num-ber.	Per cent of per-sons en-titled to bene-fits.
Unemployment .....	3,227	173	5.4	142,896	12,632	8.8
Traveling .....	5,572	2,348	42.1	174,290	29,809	17.1
Removal .....	194	17	8.8	22,387	430	1.9
Sickness .....	426,693	158,248	37.1	550,253	173,606	31.6
Invalidity and old age .....	169,587	2,315	1.4	196,259	2,681	1.4
Death .....	440,655	6,428	1.5	528,012	7,618	1.4
Emergency .....	350,786	4,396	1.3	480,699	8,747	1.8
Legal protection .....	16,915	1,098	6.5	162,264	3,299	2.0

Considering the number of persons or cases relieved, in their relation to the number of persons entitled to benefits, it is shown that the largest proportion is found in the traveling and sick benefit classes, the relief societies leading with 42.1 per cent in the former class and 37.1 per cent in the latter class. In the class of unemployment benefits the trade unions lead with 11 per cent, followed by the relief societies and educational unions, each with slightly over 5 per cent. In the removal and legal protection classes the relief societies again take the first place, the former class being here represented by 8.8 per cent and the latter class by 6.5 per cent. In the remaining classes of benefits the variations in the proportions are less marked, in the death-benefit class the rates running almost uniformly, or 1.1 per cent in the general unions and 1.5 per cent in each of the other classes of unions.



**FINANCIAL OPERATIONS.**—Of 4,729 organizations making returns to the bureau, 4,037 furnished reports regarding their financial operations during the year. The principal items of receipts and expenditures of the organizations reporting their financial operations, exclusive of 298 economic societies, for which details were not reported, are shown in the following table by kind of organization:

**RECEIPTS AND EXPENDITURES OF ORGANIZATIONS REPORTING THEIR FINANCIAL OPERATIONS, EXCLUSIVE OF ECONOMIC SOCIETIES, BY KIND OF ORGANIZATION. 1900.**

*Receipts.*

Kind of organization.	Unions reporting financial operations.	Entrance fees.	Membership dues.	Transfers from other unions.	Entertainments and festivals.	Collections and donations.	Other receipts.	Total gross receipts.	Less transfers to other unions.	Total net receipts.
General unions.....	796	\$2,395	\$43,191	\$2,499	\$26,975	\$15,782	\$48,175	\$139,017	\$2,307	\$136,710
Educational unions.....	712	1,638	31,161	727	14,670	2,800	6,432	57,428	478	56,950
Social unions.....	283	914	14,812	289	14,151	682	2,963	33,811	790	33,021
Trade unions.....	1,475	8,240	370,144	107,284	16,603	11,701	40,229	554,201	101,609	452,592
Relief societies.....	473	15,307	1,702,013	4,263	12,503	28,972	112,586	1,875,644	3,649	1,871,995
Total.....	3,739	28,494	2,161,321	115,062	84,902	59,937	210,385	2,660,101	108,833	2,551,268

*Expenditures.*

Kind of organization.	Unions reporting financial operations.	Relief.	Education, including newspapers and libraries.	Entertainments and festivals.	Organization and agitation.	Administrative and other.	Total.
General unions.....	796	\$16,855	\$11,075	\$13,756	\$1,912	\$82,087	\$125,685
Educational unions.....	712	16,063	10,664	7,788	1,146	19,994	55,655
Social unions.....	283	124	4,400	12,575	272	14,584	31,955
Trade unions.....	1,475	197,728	70,379	7,374	25,073	113,930	414,484
Relief societies.....	473	1,614,889	2,109	1,602	8,579	183,760	1,810,939
Total.....	3,739	1,845,659	98,627	43,095	36,982	414,355	2,438,718

The 298 economic societies for which details were not given reported total receipts of 33,785,979 kronen (\$6,858,554) and a total expenditure of 33,805,639 kronen (\$6,862,545). The principal item of income in the other organizations, as indicated in the foregoing table, was derived from membership dues. The slight difference between the transfers from other unions and the transfers to other unions is due to the failure of some of the unions to make complete returns on the subject.

A review of the expenditures shows that 75.7 per cent were on account of relief benefits, 4.0 per cent for educational purposes, 1.8 per cent for entertainments and festivals, 1.5 per cent for organization and agitation, and 17.0 per cent for administrative and other purposes. The total expenditures on account of relief benefits constituted 85.4 per cent of the total receipts from membership dues, this high rate being mainly due to the proportionally large amount of benefits paid by the relief societies.



The following table gives detailed information regarding the expenditures on various kinds of benefits by the general unions, the educational unions, the trade unions, and the relief societies:

EXPENDITURES OF GENERAL UNIONS, EDUCATIONAL UNIONS, TRADE UNIONS, AND RELIEF SOCIETIES FOR VARIOUS KINDS OF BENEFITS, NUMBER OF PERSONS RELIEVED, AND AVERAGE AMOUNT PER PERSON RELIEVED, 1900.

Kind of benefit.	General unions.			Educational unions.			Trade unions.			Relief societies.		
	Amt. paid for benefs.	Persons re-liev'd	Average amt. per person re-liev'd	Amt. paid for benefs.	Persons re-liev'd	Average amt. per person re-liev'd	Amt. paid for benefs.	Persons re-liev'd	Average amt. per person re-liev'd	Amt. paid for benefs.	Persons re-liev'd	Average amt. per person re-liev'd
Unemployment.....	\$1,449	856	\$1.69	\$846	568	\$1.49	\$64,336	11,035	\$5.83	\$1,180	173	\$6.82
Traveling .....	2,145	10,431	.21	435	2,517	.17	13,331	14,513	.92	672	2,348	.29
Removal .....	12	18	.64	6	4	1.50	1,518	391	3.88	46	17	2.71
Sickness.....	8,046	3,736	2.15	10,866	4,151	2.62	65,274	7,471	8.74	1,108,976	158,248	7.01
Invalidity and old age .....	71	15	4.76	95	35	2.70	20,492	316	64.85	51,026	2,315	22.04
Death .....	1,852	375	4.94	2,149	317	6.78	11,037	498	22.16	117,844	6,428	18.33
Widows .....	157	47	3.33	431	146	2.95	3,144	229	13.73	5,193	962	5.40
Orphans.....	69	69	1.00	98	179	.55	4,431	431	10.28	2,762	662	4.17
Children of living members .....	1,372	1,545	.89	347	300	1.16	77	24	3.19	-----	-----	-----
Emergency .....	1,543	546	2.83	665	270	2.46	8,187	3,535	2.32	42,544	4,396	9.68

Of the 4,729 organizations which made returns to the bureau 3,827, exclusive of the economic societies, furnished detailed statements regarding their assets and liabilities. The total assets on December 31, 1900, amounted to 21,957,429 kronen (\$4,457,358) and the total liabilities to 3,616,712 kronen (\$734,193), showing an excess of assets over liabilities of 18,340,717 kronen (\$3,723,165). The following table shows these facts in detail by kind of organization:

ASSETS AND LIABILITIES OF GENERAL UNIONS, EDUCATIONAL UNIONS, SOCIAL UNIONS, TRADE UNIONS, AND RELIEF SOCIETIES, DECEMBER 31, 1900.

Kind of organization.	Unions reporting assets and liabilities.	Assets.					Liabilities.		
		Cash on hand, deposits, etc.	Value of real estate.	Inventory.	Other.	Total.	Mortgage indebtedness.	Other.	Total.
General unions ..	852	\$109,565	\$866,558	\$86,998	\$7,653	\$1,070,774	\$426,333	\$125,920	\$552,253
Educational unions .....	729	49,203	5,297	52,513	2,682	109,695	2,558	2,826	5,384
Social unions .....	316	10,480	-----	26,309	1,136	37,925	-----	2,122	2,122
Trade unions.....	1,440	391,647	247,263	75,521	20,665	735,096	66,874	10,803	77,677
Relief societies ..	490	1,790,672	338,185	36,724	338,287	2,503,868	19,472	77,285	96,757
Total.....	3,827	2,351,567	1,457,303	278,065	370,423	4,457,358	515,237	218,956	734,193

EDUCATIONAL FEATURES.—The means employed by the workingmen's organizations for the intellectual improvement of their members consisted mainly in the introduction of various courses of instruction, lectures, and debates, and the establishment of libraries. The data collected for this report show that of 4,043 organizations considered in this connection (general unions, educational unions, trade unions,



and relief societies) 595, or 15 per cent, had introduced various courses of instruction; 49, or 1.2 per cent, had made provision for a series of debates; 1,942, or 48 per cent, had arranged lecture courses, and 2,755, or 68 per cent, maintained permanent libraries.

The courses of instruction covered a wide range of subjects, including the elementary branches, religion, theory of education, languages, general history and history of literature, geography, geometry, elements of machinery, electrotechnics, political economy, commercial and industrial branches, stenography, typewriting, drawing, painting and modeling, singing, music, dancing, gymnastics, fencing, sewing, ironing, cooking, and handiwork. The debates related mainly to social, economic, and industrial questions, to current and religious topics, and to organization and agitation. The lecture courses embraced nearly all topics of special interest to working people, including among other subjects general sciences, literature, industrial, social, and economic questions, religion, organization, etc. The libraries contained a total of 548,138 volumes, of which 50,789 were on industrial subjects, 135,166 on general scientific subjects, 239,248 on literary subjects, 25,433 on religious subjects, and 97,502 on subjects that were not specified in the reports.

Periodicals representing the direct interests of working people were published by 66 central organizations, a complete list of which together with the titles of the periodicals is given in the report. Of these periodicals 9 were issued weekly, 16 biweekly, 14 semimonthly, 6 three times a month, and the remaining either monthly or at irregular periods. Subscription to these periodicals was made obligatory upon the members of 1,381 unions, of which 1,289 were trade unions, 77 general unions, and 15 educational unions.

**MISCELLANEOUS FEATURES.**—In regard to the social features, it was reported that 2,516 unions had arranged 18,756 entertainments of various kinds in 1900, including 477 lectures, 2,661 theatrical and musical entertainments, 1,627 excursions, 2,436 balls, etc., 384 festivals of various kinds, and 6,104 meetings of a purely social character. The character of the remaining 5,067 entertainments was not specified.

The subject of securing situations for persons out of employment received special attention on the part of 728 organizations, of which 296 furnished complete returns as to the number of applications for situations registered during the year, the number of situations offered, and the number of situations secured for applicants.



The data relating to this subject are given in detail, by kind of organization, in the following table:

ORGANIZATIONS SECURING SITUATIONS FOR THE UNEMPLOYED AND SITUATIONS SECURED, 1900.

Kind of organization.	Number of organizations reporting.	Organizations making provisions for securing situations.	Organizations furnishing complete data on the subject.	Number of—		
				Situations offered.	Applications for situations.	Situations secured for applicants.
General unions.....	954	50	26	1,871	2,044	1,130
Educational unions.....	815	11	8	403	622	292
Trade unions.....	1,707	648	246	30,472	40,462	24,558
Relief societies.....	567	19	16	5,710	26,587	5,253
Total .....	4,043	728	296	38,456	69,715	31,233

The figures in the foregoing table, in so far as they relate to all organizations reporting complete data on the subject, indicate that of the total number of applicants for situations 45 per cent secured employment through the agency of the organizations. In the trade unions 61 per cent of the applicants obtained employment, in the general unions 55 per cent, in the educational unions 47 per cent, and in the relief societies 20 per cent.

During the year investigations of the condition of labor were conducted by 96 trade unions, 19 general unions, 9 educational unions, and 1 relief society, the results of which were published in 52 cases, either in the public press or in their own publications. Conferences, resulting in satisfactory agreements on questions in dispute between employers and employees, were conducted during the year by 17 general unions, 178 trade unions, and 1 educational union. The questions forming the subjects of dispute related to hours of labor in 140 cases, to wages in 124 cases, and to hygienic measures, working material, apprentices, holidays, etc., in the remaining 18 cases. The total number of meetings held by 4,729 unions during the year was 33,822, and the number of committee meetings was 50,876. During the same period 110 meetings were prohibited and 44 meetings were dissolved by the authorities.

LABOR ORGANIZATIONS IN 1904.—As previously stated, the total number of registered workingmen's organizations on December 31, 1900, was 6,931, of which 4,729 reported a membership of 907,794. On December 31, 1904, the total number of registered organizations was 8,574, an increase of 23.7 per cent over the former period, the largest increase being shown in the number of trade unions—namely, 40 per cent. An estimate made by the bureau, based upon data supplied by the unions which furnished returns in 1900, places their total membership on December 31, 1904, at approximately 1,448,357,



distributed among the several classes of organizations as shown in the following table:

MEMBERSHIP OF ORGANIZATIONS WHICH FURNISHED RETURNS ON DECEMBER 31, 1900, AND THEIR APPROXIMATE MEMBERSHIP ON DECEMBER 31, 1904, BY KIND OF ORGANIZATION.

Kind of organization.	Member- ship De- cember 31, 1900.	Approxi- mate mem- bership December 31, 1904.	Per cent of in- crease.
General unions .....	98,634	195,062	97.8
Educational unions .....	61,010	102,567	68.1
Social unions .....	27,064	53,467	97.6
Trade unions .....	147,804	300,186	103.1
Relief societies .....	460,175	613,487	33.3
Economic societies .....	113,107	183,588	62.3
Total .....	907,794	1,448,357	59.5

## BELGIUM.

*Rapport sur la Situation de l'Enseignement Technique en Belgique, 1897-1901.* Ministère de l'Industrie et du Travail. 1903. Tome I, Rapport Général et Notices, xx, 818 pp. Tome II, Tableaux Statistiques, Circulaires Ministérielles, Annexes Diverses, 469 pp.

These volumes, setting forth the condition of industrial education in Belgium, form the most recent of an irregular series of reports on this subject. The last preceding one, bearing the date of 1897, closed with the scholastic year 1895-96.

In summarizing the situation at the end of the year 1901, the number of institutions of all kinds considered in this report is given at 579, as compared with 376 on December 31, 1896. This increase affected nearly all classes, the only loss being in apprenticeship courses in weaving. Instruction is provided for both sexes.

The schools for girls experienced considerable difficulty at their beginning in 1889 in securing the favorable attention of the public. The idea was new and not kindly received by the working women and their families; but with the satisfactory results that have been obtained, and a better understanding of the practical nature of the instruction, the popular attitude has changed, and recent years have witnessed a large increase in the number of housekeeping schools, while the number of trade schools increased from 26 in 1896 to 52 in 1901. The theoretical instruction in all these schools includes, besides the general courses found in all primary and intermediate schools, the principles of domestic economy, hygiene, accounts, and science, so that there is both general culture and a preparation for practical efficiency in the performance of productive labor. By far the largest number of schools for girls are those which make domestic training a principal or subordinate part of their work, there being



292 of this class receiving Government subsidies at the close of the year 1901. Of these 119 were communal and 173 private in their control.

Schools for boys are either industrial, teaching theoretical courses and practical design, or trade schools, combining manual training with theoretical instruction. A number of the industrial schools, however, maintain trade courses. These schools may embrace one or several trades within their courses of instruction. Schools where a single trade is taught frequently owe their origin to the action of associations of employees or of employers, and occasionally to the joint action of both classes of bodies. Such united action is believed to afford special opportunities for usefulness and success. In connection with some of the schools, technical libraries and museums of trade objects have been established, which, like the schools considered in this report, are the recipients of national aid.

Of a higher grade are those schools which are intended to prepare the students for business and for consular and colonial service. Their courses of study include accounts, industrial geography, commercial law, foreign languages, stenography, and typewriting. These schools are, in some cases, open to young women as well as to young men.

The completion of the courses of the various schools and the passing of an examination entitle pupils to an appropriate diploma. The value of this diploma is enhanced by reason of the supervision exercised by the inspectors from the department of industry and labor, who make visits at least annually to each school receiving a subsidy from the Government, and report their observations to the minister. Government subsidies are furnished the schools on the basis of the nature of the instruction rather than on that of organization or control. Where the instruction is purely theoretical, the aid amounts to one-fourth the current expenses; if instruction in a trade or in manual training is given, the subsidy amounts to two-fifths of the cost of maintenance, while for the purchase and installation of tools and the establishment of museums the Government bears one-half the expense.

The following table presents for the year 1901 the number of subsidized institutions, the number of instructors, and of pupils in each class, and the total and average cost of maintenance by class of institution:



## NUMBER OF INSTRUCTORS AND PUPILS AND COST OF MAINTENANCE OF SUBSIDIZED INSTITUTIONS, BY CLASS OF INSTITUTION, 1901.

Class of institution.	Num-ber of institu-tions.	Num-ber of in-struct-ors.	Number of pupils.		Cost.		
			Total.	Per institu-tion.	Total.	Per institu-tion.	Per pupil.
FOR GIRLS.							
Housekeeping schools and classes.....	292	586	9,084	31	\$70,541	\$242	\$7.77
Trade schools .....	52	514	4,130	78	126,122	2,425	30.54
Apprenticeship shops.....	4	17	179	45	1,341	335	7.50
Total for girls.....	348	1,117	13,393	38	198,004	569	14.78
FOR BOYS.							
Superior industrial schools and courses	13	234	1,007	77	119,411	9,185	118.58
Industrial schools and courses.....	68	833	20,488	301	179,526	2,640	8.76
Courses in trade designing .....	12	38	639	53	4,888	407	7.65
Saint Luke schools.....	5	57	1,841	368	14,220	2,844	7.72
Scientific and commercial courses....	18	140	4,720	262	10,760	598	2.28
Trade schools .....	31	258	2,995	97	68,026	2,194	22.71
Trade courses .....	5	16	235	47	2,640	528	11.23
Apprenticeship shops for stonecutting	20	21	455	23	5,568	278	12.24
Apprenticeship shops for weaving.....	39	87	765	20	12,680	325	16.58
Total for boys.....	211	1,684	33,145	157	417,719	1,980	12.60
Total for girls and boys .....	559	2,801	46,538	83	615,723	1,101	13.23

In view of the recentness of the publication of the report of the Commissioner of Labor on the subject of trade and technical education (Seventeenth Annual, 1902), details as to courses of study, etc., need not be presented here, as they are there given in full. A brief discussion of the methods and scope of instruction in the schools of each class follows:

**INDUSTRIAL TRAINING FOR GIRLS.**—The ministry of industry and labor has adopted the following classification for the institutions in which industrial training for girls is offered: Housekeeping classes and schools; housekeeping-trade schools; trade-housekeeping schools; trade schools; apprenticeship courses and shops.

In the first group instruction is entirely practical and is generally given for but a single year, though it may be continued for a second year. In the housekeeping-trade schools, also, the principal instruction is along practical lines, though there is some study of arithmetic, including household accounts, of the French or Flemish language, and of hygiene. The course of instruction continues through two years, which allows for considerable training in the cutting and making of garments. The best results in the housekeeping schools have been obtained with pupils above the age of 14 years, as they can both appreciate and apply their instruction to better advantage than is possible for the younger girls. Owing to the custom in the industrial centers, however, of the girls entering shops as soon as a primary education has been obtained, it has been found necessary to admit them to these schools at the age of 12 years. The efficiency of some of these schools has been much increased recently by the establish-



ment of training courses for the mistresses and teachers, and they have risen correspondingly in the public estimation. The second group, combining something of trade instruction with domestic training, showed but slight advance during the period considered in this report. These schools and courses occupy an intermediate position and appeal especially to a class of future working women and housekeepers who must, from lack of resources, dispense with the aid of servants in their work.

The group indicated as trade-housekeeping schools, like the trade schools, gives theoretical instruction during half of the day, the other half being devoted to trade courses. Under the former head are included French, Flemish (except in the Walloon provinces), arithmetic, the metric system, the principles of geometry used in the measurement of surfaces and cubes, etc., physics, the principles of commerce, hygiene, domestic economy, trade designing, Belgian and contemporaneous history, and commercial and industrial geography.

In all the schools the trade courses include linen work (*lingerie*), the cutting and making of clothing, and housekeeping. To these may be added, according to the provisions of the various schools, instruction in the commercial sciences, as accounts, commercial law, the English and German languages, stenography, typewriting, advanced commercial and industrial geography, and business arithmetic; instruction in millinery, the making of artificial flowers, and industrial designing may also be had. Some schools offer courses in the training of mothers (*pédagogie maternelle*).

Pupils under 13 years of age and those who have not completed their primary studies are not admitted. The theoretical courses are three years in length, at the end of which an examination is held, the minimum passing grade being 65 per cent. Those who secure a certificate on this examination may present themselves to a board made up of disinterested persons for a second examination, the satisfactory passing of which entitles to a diploma. A public exhibit of the products of the students' work is also held at the close of the year as a means of securing a more extended knowledge and appreciation of the work of the schools.

The trade schools differ from the above in requiring an additional year of attendance for the completion of the prescribed studies and in the corresponding advancement in the courses in linen work and in cutting and dressmaking. The designing and making of tailor-made clothing, wraps, and ball dresses belong to the last year's work. Some schools also teach embroidery designing and give optional courses in domestic economy. Pupils from these schools go to be teachers elsewhere, a year of training teaching being provided for under the eye of their former instructors before they go out to teach independently.



Under the last of the five divisions given are found courses in cutting and fitting, in linen work, and in business; also apprenticeship shops in straw work (braiding and hat making), in embroidery, and in lace making. These institutions adapt themselves to local conditions in the matter of the subjects taught, the mode of instruction, and the length of the courses of training. The reports of the inspectors speak well of the results obtained.

Some of these schools and courses are free of cost to the pupils, while in others there are tuition charges of varying amounts, fixed by the management. No night schools are included in the institutions considered. All enjoy the same privileges and rating, so far as the Government is concerned, whether they are communal or private schools, and all alike submit to its inspection and make report of the expenses, courses of study, regulations, and management, and secure its approval of the nominations of teachers and instructors. Otherwise they are allowed the greatest latitude, the Government imposing neither programme nor regulations.

**INDUSTRIAL TRAINING FOR BOYS.**—The most numerous of the different classes of institutions for boys, as appears from the table which is presented on a preceding page, are the so-called industrial schools and courses, which are of two grades. The more numerous elementary schools are designed to furnish instruction in courses of general value to all pupils, together with specialized lines of work adapted to the needs of those engaged in or likely to engage in industrial, trade, or business careers. Theoretical instruction is the feature of these schools that distinguishes them from the trade schools in which manual skill is more exclusively developed. The end in view is announced as being “to give to the workingman instruction which he is not able to acquire in his shop, to procure for him the means of ameliorating his material condition, and of developing his intelligence by introducing him to the general laws which control the transformations of matter, thus increasing the economic value of his labor; in short, to put him in the way of increasing production and procuring for himself a better income.”

These schools are either communal or private. In some cases trade courses are combined with general industrial training, while in others there are commercial sections or courses, or those preparatory to a training in the fine arts. The periods of instruction are in general three years in length, two years being spent in general work and one in specialization. Day and evening classes are held, according to local conditions, and it is quite common to have classes on Sunday mornings. In some places, where the resources at hand are not equal to more extended work, only the Sunday morning classes are held, giving a course three or four years in length. These schools, however, are not recognized as properly comparable in their



results with those in which instruction is given on from three to seven days of the week.

The following table shows the number of industrial schools and courses subsidized, the number of instructors, the enrollment by courses, the number of girls enrolled, and the occupation and age of the pupils for each year, 1896-97 to 1900-1901:

STATISTICS OF INDUSTRIAL SCHOOLS AND COURSES, 1896-97 TO 1900-1901.

Items.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
Number of schools and courses .....	43	53	58	64	68
Number of directors, instructors, etc.....	529	619	698	754	833
Number of pupils in—					
Week-day courses.....	7,297	8,027	8,755	8,973	9,317
Sunday courses.....	4,229	6,072	6,912	7,421	7,645
Week-day and Sunday courses.....	2,195	2,181	2,455	2,848	3,526
Total enrollment .....	13,721	16,280	18,122	19,242	20,488
Number of girls enrolled .....	120	319	407	501	609
Number of pupils at close of year.....	10,195	11,630	13,166	14,197	15,518
Number of diplomas granted .....	773	869	1,073	1,221	1,368
Occupation of pupils—					
Wage-earners.....	9,094	10,669	11,851	12,466	13,427
Students .....	2,085	2,552	2,845	2,887	3,007
Salaried persons.....	1,885	2,200	2,524	2,816	2,981
Not classified .....	657	859	902	1,073	1,073
Age of pupils—					
Under 14 years .....	1,401	1,551	1,879	1,710	1,995
14 or under 16 years .....	3,742	4,234	4,884	4,981	5,201
16 or under 20 years .....	5,668	6,706	7,294	8,134	8,531
20 years or over.....	2,910	3,789	4,065	4,417	4,761

It will be observed that while the total enrollment had increased only 49 per cent during the five years considered, the enrollment of girls had increased slightly more than 400 per cent. The number taking diplomas also far exceeded the pro rata increase according to enrollment, the gain in the five years being nearly 77 per cent. The increase of "salaried persons" in attendance was more rapid than was that of the "wage-earners," being 58 per cent in the case of the former as against 48 per cent for the latter. The age group making the largest per cent of increase is that given as "20 years or over," in which the gain was nearly 64 per cent.

The more advanced type of institutions are known as superior industrial schools and courses. These receive the graduates from the industrial schools and carry them forward along lines of more advanced training, both general and specialized. These schools had their origin quite recently in a determination on the part of the public administration to make provision for industrial training of a progressive nature, similar in purpose and scope for the working man to the schools of liberal education for those who seek to pursue professional careers. To this end they undertake to qualify their graduates for positions as foremen, superintendents of establishments, and chiefs in the bureau of commerce and industry, viz, "to produce, not skilled artisans, but intelligent head workmen, indispensable auxiliaries to both the workingman and the engineer, the employee and the employer."



These schools are to be distinguished in turn from a group of superior special schools in which advanced instruction is given in some particular subject and which present more fully than does the ordinary industrial school the theoretical studies that qualify for special positions in the various employments. The report gives brief accounts of 13 such schools, 7 being for instruction in business, 3 in brewing and distilling, and 1 each in arts and crafts, in textile manufactures, and in the mining industry. These special schools enrolled 1,007 pupils in 1900-1901 as against 599 in 1896-97. Of the number enrolled in 1900-1901, 952 were in attendance at the close of the year and 244 received diplomas.

The courses in industrial or trade designing are intended to meet the needs either of workmen in the rural communes, where more extended industrial training is not available, or of workmen in some locality where a single important industry offers opportunity for specialization.

The Saint Luke schools had their beginning in 1862, their object being to aid apprentices and young workmen in acquiring such practical and theoretical knowledge of their trades as would eliminate as far as possible the elements of mere drudgery. They make special provision for the industrial arts, the studies being arranged in four groups or courses, as follows: (1) A preparatory section; (2) an architectural course, in which the subject is studied from the theoretical, practical, and historical standpoints; (3) a special section of industrial art; (4) a section of ornamentation and decoration.

These courses are, in general, free of cost to the pupils, who must be at least 13 years of age and have received a prescribed primary education. Although these schools are few in number, they are reported as exercising a great influence on the industries of the nation, due in part to the earnestness of the managers, who are members of the religious order of the Brothers of the Christian Schools, and in part to the practical methods of instruction, which produce "not professional artists, but artisan artists."

The scientific and commercial courses, which rank second in the number of pupils enrolled, have for their purpose the diffusion of a knowledge of the principles of science and business among adults and instruction in the modern languages. Classes are held in the evening to allow persons engaged during the day to get the benefit of the instruction offered, the courses varying in length from one to five years. Of the 4,720 pupils enrolled in 1901, 245 were 14 or under 16 years of age, 2,284 were 16 or under 20 years, and 2,191 were 20 years old or over. As to occupation, 424 were classed as wage workers, 294 as students, 3,094 as salaried persons, and 908 were unclassified.

The remaining groups of schools and courses are considered together in the report, inasmuch as they have the common object of



furnishing technical skill in some one or more trades, such as was previously acquired by apprenticeship service—a system of training that has become practically obsolete. These institutions vary in scope and method, being affected by local custom and conditions. Nearly all offer a measure of theoretical and technical instruction, but the practical phases of the trade taught always receive the chief place in the programmes. Both day and evening lessons are given, sometimes for a fee, sometimes without charge, while in yet other cases the learner is remunerated either by a stated allowance or by payment for the finished articles produced. In some schools the instructors and foremen give attention exclusively to the learners and in others the pupils work in the shops with the regular employees, from whom they learn in part, though always under competent oversight.

The following table shows for the trade schools the number of schools and of instructors, the enrollment by courses, and the number of pupils in each occupation and age group for each year 1896-97 to 1900-1901:

STATISTICS OF TRADE SCHOOLS, 1896-97 TO 1900-1901.

Items.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
Number of schools .....	16	17	23	29	31
Number of directors, teachers, etc. ....	106	118	165	226	258
Number of pupils in—					
Week-day courses .....	592	690	952	1,279	1,657
Sunday courses .....	148	160	244	275	289
Week-day and Sunday courses .....	459	500	629	920	1,049
Total enrollment .....	1,199	1,350	1,825	2,474	2,995
Number of pupils at close of year .....	1,007	1,145	1,515	2,023	2,358
Number of diplomas granted .....	33	71	69	130	139
Occupation of pupils:					
Workmen and apprentices .....	1,064	1,199	1,607	2,122	2,544
Students .....	131	146	191	230	275
Salaried persons .....			9	81	117
Not classified .....	4	5	18	41	59
Age of pupils:					
Under 14 years .....	225	267	337	352	399
14 or under 16 years .....	392	488	651	841	941
16 or under 20 years .....	445	454	590	941	1,166
20 years or over .....	137	141	247	340	489

From this table it appears that the number of schools had practically doubled in the five years covered, while the enrollment was two and a half times as great at the later date as at the earlier one. As would be expected, the main attendance was by those classed as workmen and apprentices, but few salaried persons enrolling. The age group, "20 years or over," is a small one, but shows the largest proportionate gain, the increase being nearly 257 per cent for the period considered. In the largest group, that of "16 or under 20 years," the gain was also in excess of the increase in the total enrollment, being 162 per cent. From these facts it appears that the instruction offered is better adapted to the needs of the more mature, the group



“under 14 years” not only being the smallest in 1900–1901, but also showing the lowest per cent of gain during the five years considered.

The last table presented shows data similar to the above for apprenticeship shops in stonecutting:

STATISTICS OF APPRENTICESHIP SHOPS IN STONECUTTING, 1896–97 TO 1900–1901.

Items.	1896–97.	1897–98.	1898–99.	1899–1900.	1900–1901.
Number of shops.....	11	11	14	19	20
Number of directors, instructors, etc.....	12	12	15	20	21
Number of pupils enrolled.....	274	278	365	401	455
Number of pupils at close of year.....	183	195	213	305	354
Number of diplomas granted.....	47	33	16	23	39
Age of pupils—					
Under 14 years.....	65	83	110	130	149
14 or under 16 years.....	112	126	182	182	208
16 or under 20 years.....	92	68	73	87	97
20 years or over.....	5	1	-----	2	1

While the number of these shops has nearly doubled in the five-year period considered, the gain in the number of students enrolled has been proportionately less than in the more general trade courses; the number of diplomas granted shows a very considerable falling off since 1896–97, though gaining steadily since 1898–99. The instruction is obviously better fitted for the younger class of pupils, as but few are found in the shops who have passed the age of 20 years.

Twenty-four apprenticeship shops in weaving had 460 apprentices in 1901 as compared with 554 in 1896. Of the enrollment in 1901 114 were under 14 years of age, 140 were 14 or under 16 years, 107 were 16 or under 20 years, and 99 were 20 years of age or over. There were 142 who entered the shops in 1901 for the first time.



## DECISIONS OF COURTS AFFECTING LABOR.

[Except in cases of special interest, the decisions here presented are restricted to those rendered by the Federal courts and the higher courts of the States and Territories. Only material portions of such decisions are reproduced, introductory and explanatory matter being given in the words of the editor.]

### DECISIONS UNDER STATUTORY LAW.

EMPLOYERS' LIABILITY—PRESUMPTIONS AS TO NEGLIGENCE—MINE REGULATIONS—APPLICATION OF STATUTE—*Allen v. Kingston Coal Co., Supreme Court of Pennsylvania, 61 Atlantic Reporter, page 572.*—In this case Prudence Allen sued to recover damages for the death of her husband. Judgment was against the plaintiff in the court of common pleas of Luzerne County, which judgment was affirmed by the supreme court. The facts of the case appear in the opinion of the court, which is given herewith:

There was no evidence that plaintiff's husband came to his death through the negligence of the defendant. The substance of the testimony is that he was found dead just at the mine door, with injuries on his body that seemed to indicate that he had been crushed. The apparent elements of danger were the sides of the gangway, the loaded coal cars, and the mine door, which was kept closed by a strong pressure of air forced in for ventilation. Which of these elements, if any, or what combination of them, caused his death, was wholly conjectural, and none of them implied any negligence on the part of the defendant.

Appellant's theory, as stated by her counsel, was that "the accident that caused her husband's death, and which was the only theory advanced at the trial, was that because of the negligence of the defendant company he had been caught between the side of the passageway at the main door and the side of a moving car, and squeezed to death." But, conceding this as the most probable manner of his death, it does not tend to show negligence of the defendant. The deceased may have slipped and fallen off his car, or jumped off, or have got off safely, and yet been caught by the door before he had a secure hold of it to keep it open. \*His own failure in this respect is quite as probable as any other hypothesis. The doctrine "res ipsa loquitur," dangerous and uncertain at best, is never to be applied, except where it not only supports the conclusion contended for, but also reasonably excludes every other. (*Oil Co. v. Pennsylvania Torpedo Co., 190 Pa. 350., 42 Atl. 707; Alexander v. Pennsylvania Water Co., 201 Pa. 252, 50 Atl. 991.*)



Appellant argues that the plaintiff is entitled to the presumption that deceased was innocent of negligence. True, but so is the defendant, and the presumptions are equally balanced. Negligence, contributory or other, is not to be presumed, but must be shown by evidence. In the instances where it is said that this presumption in plaintiff's favor must take the case to the jury, there was at least some evidence of defendant's negligence, as, e. g., the excessive speed of the car in *Haughey v. Pittsburg Railways Co.* (No. 1) 210 Pa. 363, 59 Atl. 1110, cited by appellant. And even in *Stringert v. Township of Ross*, 179 Pa. 614, 36 Atl. 345, where the minority of the judges thought the existence of a deep rut in the highway was sufficient evidence of defendant's negligence to take the case to the jury, the court held that the cause and manner of the accident were merely conjectural, and sustained a nonsuit.

Appellant's case can get no assistance from the mining act of June 2, 1891 (P. L. 176). The requirement of section 10 of that act, amended by the act of April 20, 1899 (P. L. 65), that all main doors shall have an attendant, "whose constant duty it shall be to open them for transportation and travel, and prevent them from standing open longer than is necessary for persons or cars to pass through," has reference solely to ventilation, not to the safety of persons using the gangways. The object was to keep the doors closed. In this case the evidence is that the door was kept closed by the air pressure, and required considerable effort to open or to keep it open.

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EMPLOYERS' LIABILITY—SAFE AND SUITABLE APPLIANCES—SCAFFOLD—CONSTRUCTION OF STATUTE.—*Hutton v. Holdbrook, Cabot & Daly Contracting Co., United States Circuit Court for the Southern District of New York, 139 Federal Reporter, page 734.*—One Hutton sued to recover damages for injuries received while in the employment of the company named. Hutton was a mason who, with other masons, was working on a scaffold which was moved and reerected from time to time by their helpers. The injuries complained of were occasioned by the falling of the scaffold, and the action was based on the provisions of the labor law of New York, which prohibits an employer or superintendent from furnishing or erecting or causing to be furnished or erected for the use of such workmen scaffolding, etc., which is "unsafe, unsuitable, or improper," and is not so "constructed, placed, and operated" as to give proper protection to life and limb.

The trial resulted in the court directing a verdict for the defendant, using in part the following language:

There is in this case no element of negligence, except that which consists of the omissions of some of the helpers in the plaintiff's gang of workmen in erecting the scaffolding in a proper way. The defendant furnished a proper and suitable scaffolding, but, in adjusting it, as was required from time to time, to a new location, the helpers did so improperly, and in consequence it fell when the plaintiff was using it.



The case was before the circuit court on a motion for a new trial, which was denied on grounds that appear in the following extracts from the remarks of Judge Wallace, who delivered the opinion:

There is no dispute about the facts, and that they were as stated by the court is conceded; but it is insisted for the plaintiff that because of the provisions of the labor law of New York (chapter 415, p. 461, Laws 1897, as amended by chapter 192, p. 350, Laws 1899), contained in sections 18 and 19 (p. 467), the defendant was liable, notwithstanding the scaffold became unsafe solely by the negligence of the plaintiff's fellow-servants.

There is no doubt that these sections contain "a positive prohibition laid upon the master, without exception on account of the carelessness of his servant." (*Stewart v. Ferguson*, 164 N. Y. 553, 556, 58 N. E. 662, 663.) [See Bulletin No. 34, p. 527.] The question is, however, whether they refer to a scaffolding which when furnished and erected is safe and suitable, but becomes unsafe merely because of the careless way in which it is adjusted by the men who are to use it in the course of their work.

If it had been the purpose of the statute to make the master liable to his servant for all the negligent acts of his other servants in the same employment, including the fellow-servants of the servant injured, that intention could have been, and doubtless would have been, expressed in a few words, and so plainly as to be unmistakable. Such a rule of liability would be so radical a departure from existing law, and introduce into the large industries of the country such incalculable hazards of loss to the employers of labor, that the purpose to adopt it is not to be attributed to the legislature in the absence of plain language to that effect.

According to the law of New York, as declared by its highest court, a scaffold is not a place, within the meaning of the rule that it is incumbent upon the master to furnish a servant with a safe place in which to work, but is an appliance. (*Butler v. Townsend*, 126 N. Y. 105, 26 N. E. 1017.) Previous to the statutory changes in the law the master was bound only to use due care to make the scaffold safe, and was held to have exercised due care if he had furnished proper materials, and employed a skillful and experienced builder to erect it. (*Devlin v. Smith*, 89 N. Y. 470, 42 Am. Rep. 311.) It was doubtless the purpose of the provisions of the labor law to substitute for this rule of liability one making his obligation absolute to furnish and erect a safe structure. The language of the two sections is satisfied by giving them a construction accordingly, and without imposing upon the master a liability that was never supposed to exist. The provisions mean that his obligation shall be imperative, when it is his duty to furnish or erect a scaffold, to furnish a safe one; but they do not mean that his obligation shall be imperative, when he has furnished a safe one to his workmen, to see that they use proper care in moving it and adjusting it from time to time as the nature of their work requires. Nor do they mean that, when he has furnished the proper materials for a safe scaffold to workmen who in the usual course of their employment are to make the scaffold, he shall be liable to them in the event that, by their neglect or misconduct in making it safe for their use, it proves unsafe.



EMPLOYERS' LIABILITY—USE OF UNGUARDED MACHINERY—ASSUMPTION OF RISK—CONTRIBUTORY NEGLIGENCE—CONSTRUCTION OF STATUTE—*Hall v. West & Slade Mill Co., Supreme Court of Washington, 81 Pacific Reporter, page 915.*—The plaintiff, Hall, had been injured while in the employment of the company named by reason of the unguarded condition of a set screw on a shaft. The action was based on a statute requiring the guarding of such appliances and providing a penalty for noncompliance with the law.

The plaintiff had secured a judgment in the superior court of Chelalis County, and on appeal to the supreme court, this judgment was affirmed.

The chief ground of contest was the ruling of the lower court that the company was not entitled to the defense of the assumption of risk, since it had failed to comply with the law requiring guards. This was in accordance with the ruling in a mining case, *Green v. Western American Co., 30 Wash. 87, 70 Pac. 310*, which was in turn based on the case, *Narramore v. Cleveland, etc., Ry. Co., 96 Fed. 298, 37 C. C. A. 499, 48 L. R. A. 68.* [See Bulletin No. 26, p. 202.] Other cases were cited, and the conclusion reached "that the trial court did not err in holding that the doctrine of assumption of risk was not available to the appellant as a defense to the respondent's (Hall's) cause of action."

On the question of contributory negligence the court said:

The appellant next contends that the court erred in refusing to rule, as a matter of law, that the respondent was guilty of contributory negligence. All that the evidence shows on this question is that the respondent continued in his work after he had knowledge of the fact that the collar and set screw which caused his injury was uncovered. But it will hardly do to say that an employee is guilty of contributory negligence for merely working in a dangerous place, when he does not assume the risk of injury for working therein. It is true that in such cases contributory negligence and assumption of risk approximate, and it is difficult to draw a line between them; but we think that, to convict an employee of contributory negligence for working in a place where he does not assume the risk of injury, it must be shown that he did not use care reasonably commensurate with the risk to avoid injurious consequences—in other words, that it was some negligent act of his own that caused his injury, and not alone the dangers of his situation.

There was a dissenting opinion in which three of the seven judges concurred, in which the ground was taken that as nothing was said in the statute about civil liabilities or actions, it did not affect the defenses in a civil suit, and was nothing more than a criminal statute. The case of *Nottage v. Sawmill Phoenix, 133 Fed. 979* [see Bulletin No. 58, p. 990], in which the same law was construed by a United States circuit court, was cited, as well as numerous other cases in



support of the dissenting views. The opinion is quite lengthy, but the following brief extract indicates the line of reasoning pursued:

The language of this factory act is clear, plain, and without ambiguity. Its meaning can be readily understood. When the legislature attempts to change the law of a State upon a given subject by creating a statute covering such matter, the citizens of that State have a right to look to the language of such statute for the change intended and effected. The extent of the change must be ascertained from the terms of the statute itself. The court which gives to a statute a meaning which none of its terms sustain is thereby creating a law—a thing the court has no right to do. Applying the foregoing facts and principles to the case at bar, it will be seen that there is no authority for holding that this statute destroyed the defense of assumed risk in a case of this kind or any kind. There is nothing in the title or body of the statute expressing or indicating any such purpose. It being conceded that the defense would still be valid, were it not for this statute, and it being shown that the statute does not mention or refer to the matter in any manner whatever, it would seem to be logically demonstrated that no change was made. It is axiomatic that a thing can not be changed unless something changes it. It would seem to be equally evident that a rule of law is not changed by a statute that does not mention, refer to, or in any manner deal with said rule of law. If the legislature had intended this statute to cut off the defense of assumed risk, it could easily have placed therein language to evidence that intent. It did not do so. It gave no expression whatever of any such purpose. How this court can find that the legislature intended by this statute to defeat this defense, when the statute contains not a word indicating such an intention, is a query to which I have received no satisfactory answer.

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EXAMINATION AND LICENSING OF PLUMBERS—CONSTITUTIONALITY OF STATUTE:—*State ex rel. Chapel v. Justus, Supreme Court of Minnesota, 97 Northwestern Reporter, page 124.*—Paul Chapel was arrested for a violation of chapter 356, Laws of 1901, State of Minnesota, and sued out a writ of habeas corpus. From an order of the district court of Ramsey County vacating the writ, Chapel appealed, procuring a reversal of the order and a direction that he be discharged.

The chapter named required journeymen plumbers in cities of 10,000 or more population and having a system of sewers or waterworks, to procure a certificate of competency from a State board, and provided penalties for violation of the law.

The conclusion of the court and the reasons therefor appear in the following extracts from the remarks of Judge Lewis, who spoke for the court:

The act under consideration is in conflict with the principles of special legislation, as defined by the decisions of this court, in two respects: It has adopted as a basis of classification cities having a system of sewer and waterworks. And in its application to plumbers



it makes an arbitrary and unjustifiable distinction between master plumbers, so called, and journeymen plumbers. We consider that there is no reasonable ground for distinction in the application of such a law to cities with or without sewer and water systems. The object to be attained by the act is to prevent unskilled workmen from setting death traps emitting poisonous air. It is a matter of common knowledge that in many of the villages of the State where they have not been able to install water plants or sewer systems, the inhabitants frequently provide for themselves sewer systems, by means of cess-pools and other ways of drainage; and in cities of 10,000 people, or less, where sewer and water systems are installed, those who are not accessible to the established system install their private plants. It is the effect that faulty plumbing has upon the inmates of the building wherein it is perpetrated which is sought to be corrected. The purpose is to protect people's health and comfort. The effect of imperfect plumbing is as pernicious, so far as those directly affected are concerned, in a village or town without a sewer or water system, as where such public works exist. It is true that in communities where the larger number of people are centered there may be a violation of the laws of health to a greater extent, but this is merely a difference in degree, and not in character, and the classification based upon such a principle is purely arbitrary. (Murray v. Board of County Commissioners, 81 Minn. 359, 84 N. W. 103, 51 L. R. A. 828, 83 Am. St. Rep. 379.) Again, a law of this kind, intended to protect the health and general comfort of the public, should be general and complete in its application, and there is no reasonable ground for making a distinction between what is termed a "master plumber" and "journeyman plumber." If it is essential that the ordinary workman for hire, called a "journeyman plumber," shall have the necessary training and experience to pass such an examination before he shall be permitted to perform such technical mechanical services, for a much greater reason should the master plumber, who has the additional duty of hiring and discharging employees, be required to submit to the same tests. The provision which exempts master plumbers from its application authorizes them to do the very thing which the act attempts to prevent in respect to journeymen plumbers, and it can not be assumed that a master plumber does not or may not perform the services usually performed by journeymen plumbers. (State ex rel. Winckler v. Benzenberg (Wis.) 76 N. W. 345.)

## DECISIONS UNDER COMMON LAW.

BOYCOTTS—PICKETING—INJUNCTION—*Jensen v. Cooks' and Waiters' Union of Seattle, et al.*, Supreme Court of Washington, 81 Pacific Reporter, page 1069.—The plaintiff, Jensen, was proprietor of a café in Seattle, Wash., and had in his employment a floor manager, Kuehl, who was not a member of the union. Certain employees of Jensen, members of the union, demanded that Kuehl be discharged on the ground that he was not a member. This Jensen refused to do. These employees then endeavored to induce Kuehl to join, failing in which a strike was ordered, the cooks and waiters walked out,



and pickets were placed at the entrance to the café, with the purpose of preventing patrons from entering.

Jensen asked for and secured an injunction from the superior court of King County, forbidding the union and certain individuals to interfere with and injure the complainant's business. From this action of the court an appeal was taken to the supreme court, in which the action of the court below was affirmed. The opinion of the supreme court appears in the following paragraph:

In discussing the question suggested by the record the arguments of counsel have taken a wide range, and elaborate briefs have been filed, in which numerous authorities are collated. The vital question at issue, however, it seems to us, is a simple one, and easy of solution. Clearly, the acts of the appellants and defendants as set forth in the complaint are illegal, and may be restrained by an injunction. It is true that a man not under contract obligations to the contrary has the right to quit the service of another at any time he sees fit, and may lawfully state, either publicly or privately, the grievances felt by him which gave rise to his conduct. And that right which one man may exercise singly many may lawfully agree by voluntary association to exercise jointly. But one man singly, nor any number of men jointly, having no legitimate interests to protect, may not ruin the business of another by maliciously inducing his patrons and other persons not to deal with him. Men can not lawfully jointly congregate about the entrance of another's place of business, and there, either by persuasion, coercion, or force, prevent his patrons and the public at large from entering his place of business or dealing with him. The right of personal liberty and the right of private property are fundamental rights. The object and purpose of all law is their protection. And, if the law fails in this particular, men will endeavor to protect these rights by their own might, and in doing so will commit acts which lead to breaches of the peace, riot, and bloodshed, and, if continued in, the final subversion of all law. The acts of the defendants as set forth in the complaint amounted to an invasion of the respondent's lawful rights, and they were properly enjoined by the trial court.

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INJUNCTION—CONTEMPT—JURY TRIAL—CONTRACT FOR EXCLUSIVE EMPLOYMENT OF UNION LABOR—STRIKE—*O'Brien v. People ex rel. Kellogg Switchboard & Supply Co., Supreme Court of Illinois, 75 Northeastern Reporter, page 108.*—John O'Brien was found guilty of contempt by the superior court of Cook County, the Illinois appellate court affirming the judgment. Thomas Queenan, Lee S. Fisher, Jacob Christensen, and Albert Mashek had also been adjudged guilty of contempt on the same grounds, their cases having been consolidated in the appellate court and likewise in this appeal to the supreme court, the appeal in both instances resulting in the affirmation of the sentence of the court below, with only slight modification of the pen-



alty of one defendant. The Kellogg Switchboard and Supply Company is a manufacturing corporation employing from 500 to 800 men and girls. In May, 1903, its officers were called upon by representatives of labor unions, proposing a closed-shop contract, which the company refused to sign. A strike followed and complaints were made of picketing, of the intimidation of employees willing to work, and of interference with the company's business. An injunction was granted against such interference and due notice thereof given, and it was for violation of this injunction that the contempt proceedings referred to above were prosecuted. [See Bulletin No. 53, p. 961.]

Questions were raised as to the sufficiency of the bill and the jurisdiction of the court, which were decided adversely to the appellants, after which Judge Wilkin, speaking for the court, said:

It is again insisted with much earnestness that this proceeding is criminal in its nature, and therefore the defendants below were entitled to be discharged upon their sworn answer, and, if their answer was not sufficient, they could only be punished after they had been tried and convicted by jury. Proceedings for contempt of court are of two classes: those which are criminal in their nature, and those which are designated as purely civil remedies. When the contempt consists of something done or omitted in the presence of the court tending to impede or interrupt its proceedings or lessen its dignity, or out of its presence in disregard or abuse of its process, the proceeding is punitive or criminal, and the penalty is inflicted by way of punishment for the wrongful act, and to vindicate the authority and dignity of the people as represented by their judicial tribunals. In such cases the application for attachment may be made in the original cause, yet the contempt proceeding will be a distinct case, criminal in its nature. Cases of this kind are clearly distinguished from cases where the parties to a civil suit, having the right to demand that the other party do some act for their benefit, obtain an order from a proper court commanding the act to be done, and, upon refusal, the court, by way of executing its orders, proceeds as for contempt, for the purpose of advancing the civil remedy of the other party to the suit. In this class of cases, while the authority of the court will be incidentally vindicated, its power has been called into exercise for the benefit of a private litigant, and not in the public interest, merely. If imprisonment is ordered, it is not as a punishment, but to the end that the other party to the suit may obtain a remedy for the advancement of his own private interest and rights which he could not otherwise maintain. (Loven *v.* People, 158 Ill. 159, 42 N. E. 82; Crook *v.* People, 16 Ill. 534; People *v.* Diedrich, 141 Ill. 665, 30 N. E. 1038; Lester *v.* People, 150 Ill. 408, 37 N. E. 1004, 41 Am. St. Rep. 375; Leopold *v.* People, 140 Ill. 552, 30 N. E. 348.) The bill for the writ of injunction which the defendants are charged with having violated alleged that the complainant had vast interests at stake in the business enterprise in which it was engaged, and that the defendants had conspired together unlawfully to injure that business. Upon this bill being filed, a writ of injunction was ordered for the purpose of protecting the company against the unlawful acts of certain persons; and when the injunction was issued, and the plaintiffs in error



were attached for contempt of court, it was primarily because they were injuring the business of the Kellogg Company, and the punishment was inflicted to prevent such injury. While it is true that the dignity of the law and the order of the judicial tribunal have been violated, this was merely incidental to the rights of private individuals. The proceeding for the attachment was civil, and in no sense criminal. The rule is that, when the defendant is attached for contempt of court for a criminal offense and files a sworn answer, that answer, if sufficient to purge him of the alleged contempt, may be taken as true and the defendant discharged. But this rule applies only where the proceeding is brought to vindicate the law or the dignity of the court, and does not apply to acts treated as contempts, for the enforcement of orders and decrees as a part of the remedy sought to be enforced. (*Loven v. People*, 158 Ill. 159, 42 N. E. 82.) In the case at bar plaintiffs in error filed their sworn answer to the petition for attachment for contempt, and, as these proceedings were not purely criminal in their nature, the answers filed did not entitle them to be discharged, and the chancellor committed no error in so holding.

It is, however, contended that, even though they were not entitled to be discharged upon their sworn answers, they still had the constitutional right to a trial by jury, and could not be legally deprived of their liberty or property without such a trial. Upon the filing of the petitions for contempt and the appearance of the defendants thereto, the court proceeded in the summary to hear the case upon the petitions, answers, and affidavits filed by the respective parties. In 1893 the legislature of this State passed an act providing for a trial by jury in all cases where a judgment was to be satisfied by imprisonment. (Laws 1893, p. 96.) In the case of *Barclay v. Barclay*, 184 Ill. 471, 56 N. E. 636, 51 L. R. A. 351, we decided that this act did not apply to the case of proceedings for contempt of court, where it was sought to coerce defendant into the performance of the duty which the court had ordered him to perform. (See, also, *People v. Kipley*, 171 Ill. 44, 49 N. E. 229, 41 L. R. A. 775; *United States v. Debs*, 158 U. S. 564, 15 Sup. Ct. 900, 39 L. Ed. 1092.) These authorities are decisive of the question here raised, and hold that the defendants in such a proceeding as this are not entitled to a trial by jury.

The court then reviewed the attempt of the unions to procure a "closed shop" contract, in connection with which the company was informed that a strike would be called if the agreement was not signed.

In other words, these business agents sought to obtain the signing of the contract by threats, or to induce the company to sign it in order to avoid a strike. A contract executed under duress is voidable, and duress is present where a party is constrained, under circumstances which deprive him of the exercise of free will, to agree to or to perform the act sought to be avoided. (10 Am. & Eng. Ency. of Law (2d ed.) p. 321.) The law is well settled that every person shall be protected in the right to enter into contracts, or in refusing to do so, as he shall deem best for the advancement of his own interests, without interference by others. No person or combination of persons can legally, by direct or indirect means, obstruct or inter-



fere with another in the conduct of his lawful business, and any attempt to compel an individual, firm, or corporation to execute an agreement to conduct his or its business through certain agencies or by a particular class of employees is not only unlawful and actionable, but is an interference with the exercise of the highest civil right.

Judge Wilkin then quoted at some length from *Doremus v. Hennessey*, 176 Ill. 608, 52 N. E. 924, 43 L. R. A. 797, 68 Am. St. Rep. 203 [see Bulletin No. 22, p. 463], citing a number of other cases, and said:

Under the foregoing authorities there can be no doubt that any attempt to coerce the Kellogg Switchboard & Supply Company into signing said agreement by threats to order a strike was unlawful. It was violative of the clear legal right of the company, and was unjust and oppressive as to those who did not belong to the labor organizations. Nevertheless the strike was ordered, and thereafter plaintiffs in error sought by threats, intimidation, and violence to prevent men and women from taking the places of the strikers.

After further reviewing the evidence as to violence, etc., the court concluded:

The evidence, considered as a whole, is convincing that each of the plaintiffs in error was actively engaged in one or more of these unlawful acts, or aided, abetted, advised, assisted, or encouraged others to commit them. That the acts were unlawful and in disregard of the expressed commands of the injunction can not be denied.

The importance and far-reaching consequences of the cases are fully appreciated. We have endeavored to give the material questions raised and discussed in the argument due consideration, and have reached the conclusion that the judgments of the superior court were properly affirmed by the appellate court. The judgment of the latter court will accordingly be affirmed.



## LAWS OF VARIOUS STATES RELATING TO LABOR ENACTED SINCE JANUARY 1, 1904.

[The Tenth Special Report of this Bureau contains all laws of the various States and Territories and of the United States relating to labor in force January 1, 1904. Later enactments are reproduced in successive issues of the Bulletin from time to time as published.]

### CALIFORNIA.

#### ACTS OF 1905.

##### CHAPTER 18.—*Employment of children—Hours of labor—Age limit.*

(See pp. 200–202, above.)

##### CHAPTER 34.—*Hours of labor of drug clerks.*

SECTION 1. As a measure for the protection of public health, no person employed by any person, firm or corporation, shall for more than an average of ten hours a day or sixty hours a week of six consecutive calendar days, perform the work of selling drugs or other medicines, or compounding physicians' prescriptions, in any store, establishment or place of business, where and in which drugs or medicines are sold, at retail, and where and in which physicians' prescriptions are compounded: *Provided*, That the answering of and attending to emergency calls shall not be construed as a violation of this act.

SEC. 2. No person, firm or corporation employing another person to do work which consists wholly or in part of selling, at retail, drugs or medicines, or of compounding physicians' prescriptions, in any store, or establishment or place of business where or in which medicines are sold and where and in which physicians' prescriptions are compounded shall require or permit said employed person to perform such work for more than an average of ten hours a day, or sixty hours a week of six consecutive calendar days.

SEC. 3. Any person, firm or corporation violating any of the provisions of this act shall be deemed guilty of misdemeanor and shall be punished therefor by a fine not less than twenty dollars nor more than fifty dollars, or by imprisonment for not exceeding sixty days, or by both such fine and imprisonment, at the discretion of the court.

Approved February 28, 1905.

##### CHAPTER 75.—*Employment of children—Messengers.*

(See p. 199, above.)

##### CHAPTER 113.—*Commissioner of labor—Statistics relating to marriage, etc.*

SECTION 1. The commissioner of the bureau of labor statistics is hereby directed, in addition to his other duties, to collect and present in his biennial report to the legislature, statistics relating to marriage, divorce, and crime.

SEC. 2. It is hereby declared to be the duty of all officers of each respective county, city, or city and county, in addition to their other duties, whose duty it is to keep a record of marriage, divorce, or crime, and they must furnish to the commissioner of the bureau of labor statistics, upon his request, whatever data it may be necessary for said commissioner to acquire in complying with the provisions of section one of this act.

Approved March 18, 1905.



CHAPTER 145.—*Employment offices.*

SECTION 1. Section three of an act entitled, "An act defining the duties and liabilities of employment agents, making the violation thereof a misdemeanor, and fixing the penalties therefor.[]" approved February 12, 1903, is amended to read as follows:

Section 3. It shall be unlawful for any employment agent in the State of California, to induce, influence, persuade, or engage any person to change from one place to another in this State, or to change from any place in any State, Territory, or country, to any place in this State to work in any branch of labor, through or by means of any representations whatsoever, whether spoken, written, or advertised in printed form, unless such employment agent shall have assured himself beyond a reasonable doubt that such representations are true and cover all the material facts affecting the employment in question. Whenever any such representation, whereby any person is induced, influenced, persuaded, or engaged to change from one place to another in this State, or from any place in any State, Territory, or country, to any place in this State to work in any branch of labor, shall prove to be in any material degree at variance with, or short of the truth, the employment agent responsible for such representations shall immediately return to any person who shall have been influenced, by such representations, any and all fees paid by such person to said employment agent on the strength of such representations, together with an amount of money sufficient to cover all necessary expenses incurred by such person influenced by such representations in going to and returning from, any place he shall have been influenced by such representations to visit in the hope of employment.

SEC. 2. Section four of said act [limiting fee] is hereby repealed.

Approved March 18, 1905.

CHAPTER 505.—*Hours of labor on public works—Retaining wages of employes.*

SECTION 1. A new section is hereby added to the Penal Code, to be numbered 653c, and to read as follows:

Section 653c. The time of service of any laborer, workman, or mechanic employed upon any of the public works of the State of California, or of any political subdivision thereof, or upon work done for said State, or any political subdivision thereof, is hereby limited and restricted to eight hours during any one calendar day; and it shall be unlawful for any officer or agent of said State, or of any political subdivision thereof, or for any contractor or subcontractor doing work under contract upon any public works aforesaid, who employs, or who directs or controls, the work of any laborer, workman, or mechanic, employed as herein aforesaid, to require or permit such laborer, workman, or mechanic, to labor more than eight hours during any one calendar day, except in cases of extraordinary emergency, caused by fire, flood, or danger to life or property, or except to work upon public military or naval defenses or works in time of war. Any officer or agent of the State of California, or of any political subdivision thereof, making or awarding, as such officer or agent, any contract, the execution of which involves or may involve the employment of any laborer, workman, or mechanic upon any of the public works, or upon any work, hereinbefore mentioned, shall cause to be inserted therein a stipulation which shall provide that the contractor to whom said contract is awarded shall forfeit, as a penalty, to the State or political subdivision in whose behalf the contract is made and awarded, ten dollars for each laborer, workman, or mechanic employed, in the execution of said contract, by him, or by any subcontractor under him, upon any of the public works, or upon any work, hereinbefore mentioned, for each calendar day during which such laborer, workman, or mechanic is required or permitted to labor more than eight hours in violation of the provisions of this act; and it shall be the duty of such officer or agent to take cognizance of all violations of the provisions of said act committed in the course of the execution of said contract, and to report the same to the representative of the State or political subdivision, party to the contract, authorized to pay to said contractor moneys becoming due to him under the said contract, and said representative, when making payments of moneys thus due, shall withhold and retain therefrom all sums and amounts which shall have been forfeited pursuant to the herein said stipulation. Any officer, agent, or representative of the State of California, or of any political subdivision thereof, who shall violate any of the provisions of this section, shall be deemed guilty of misdemeanor, and shall upon conviction be punished by fine not exceeding five hundred dollars, or by



imprisonment, not exceeding six months, or by both such fine and imprisonment, in the discretion of the court.

SEC. 2. A new section is hereby added to the Penal Code, to be numbered 653d, and to read as follows:

Section 653d. Every person who employs laborers upon public works, and who takes, keeps, or receives for his own use any part or portion of the wages due to any such laborers from the State or municipal corporation for which such work is done, is guilty of a felony.

Approved March 21, 1905.

#### CHAPTER 509.—*Trade-marks of trade unions—Marking goods.*

SECTION 1. A new section is hereby added to the Penal Code, to be numbered three hundred and forty-nine a, and to read as follows:

Section 349a. Any person engaged in the production, manufacture, or sale of any article of merchandise made in whole or in part in this State, who, by any imprint, label, trade-mark, tag, stamp, or other inscription or device, placed or impressed upon such article, or upon the cask, box, case, or package containing the same, misrepresents or falsely states the kind, character, or nature of the labor employed or used, or the extent of the labor employed or used, or the number or kind of persons exclusively employed or used, or that a particular or distinctive class or character of laborers was wholly and exclusively used or employed, when, in fact, another class, or character, or distinction of laborers was used or employed, either jointly or in anywise supplementary to such exclusive class, character, or distinction of laborers, in the production or manufacture of the article to which such imprint, label, trade-mark, tag, stamp, or other inscription or device is affixed, or upon the cask, box, case, or package containing the same, is guilty of a misdemeanor, and punishable by a fine of not less than fifty nor more than five hundred dollars, or by imprisonment in the county jail for not less than twenty nor more than ninety days, or both.

Approved March 21, 1905.

#### CHAPTER 568.—*Employment of children—Certain employments forbidden.*

(See pp. 199, 200, above.)

### COLORADO.

#### ACTS OF 1905.

#### CHAPTER 79.—*Boycotting and blacklisting.*

SECTION 1. It shall be unlawful for any person or persons to loiter about or patrol the streets, alleys, roads, highways, trails or place of business of any person, firm or corporation engaged in any lawful business, for the purpose of influencing or inducing others not to trade with, buy from, sell to, work for, or have business dealings with such person, firm or corporation, or to ticket the works, mine, building or other place of business or occupation of such other person, persons, firm or corporation, for the purpose of obstructing or interfering with or injuring any lawful business, work or enterprise: *Provided*, That nothing herein shall prevent any person from soliciting trade, custom or business for a competitive business.

SEC. 2. It shall be unlawful to print or circulate any notice of boycott, boycott card, sticker, banner, sign or dodger, publishing or declaring that a boycott or ban exists, or has existed [existed] or is contemplated against any person, persons, firm or corporation doing a lawful business, or publish the name of any judicial officer or other public officer upon any notice of boycott, boycott card, sticker, banner, sign or other similar list, because of any lawful act or decision of such official.

SEC. 3. It shall be unlawful to use force, threats, or other means of intimidation to prevent any person from engaging in any lawful occupation at any place he or she sees fit.

SEC. 4. It shall be unlawful for any employer to maintain a black list, or to notify any other employer that any workman has been blacklisted by such employer, for the purpose of preventing such workman from receiving employment: *Provided, however*, That nothing herein shall prevent a former employer



of any workman or any former employee from imparting a fair and unbiased opinion of a workman's or employer's [employee's] qualifications when solicited so to do by a later or prospective employer of such workman, or employee; nor shall anything in this act be construed to prevent any merchant or professional man, or any association of the same, from maintaining or publishing a list concerning the credit or financial responsibility of any person or persons dealing with him or them on credit.

SEC. 5. Any person, firm or corporation violating any provision of this act shall be guilty of a misdemeanor, and, on conviction, shall be sentenced to pay a fine of not less than ten dollars (\$10) nor more than two hundred and fifty dollars (\$250), or to be imprisoned not to exceed sixty (60) days in the county jail, or both, in the discretion of the court.

Approved April 20, 1905.

#### CHAPTER 119.—*Hours of labor of employees in mines, smelters, etc.*

SECTION 1. All labor of miners in underground mines, or other underground workings and labor directly attending blast furnaces, either in smelters or in ore reduction works, in directly attending stamp mills, chlorination and cyanide processes and directly attending smelting furnaces producing metal or matte, which labor is in contact with noxious fumes, gases or vapors, is hereby declared dangerous and injurious to health, life and limb; and the period of employment for all persons so employed in underground mines or other underground workings, attending blast furnaces either in smelters or in ore reduction works, in stamp mills, in chlorination and cyanide mills, and attending smelting furnaces producing metal or matte, shall be eight hours per day; except in cases of emergency, where life or property is in imminent danger.

SEC. 2. Every person, body corporate, agent, manager, superintendent, employer, president or directors shall, in every case of such emergency, make to the commissioner of bureau of labor statistics, within ten (10) days after the commencement of such emergency, a report, according to the form which may be prescribed by him, verified by the oath or affirmation of such person, employer, agent, manager, superintendent, president or director; each report shall exhibit in detail the circumstances creating such emergency.

SEC. 3. Any violation of this act shall constitute a misdemeanor and be punished by a fine of not less than fifty dollars (\$50) nor exceeding three hundred dollars (\$300).

Approved March 21, 1905.

### CONNECTICUT.

#### ACTS OF 1905.

#### CHAPTER 78.—*Assignments of wages.*

SECTION 1. No assignment of future earnings made as security for a loan or other indebtedness shall be valid unless the amount of such indebtedness shall be stated therein, together with the rate of interest to be charged thereon, nor unless the term for which such earnings are assigned shall be definitely limited in the assignment, nor unless such assignment shall bear a dated certificate of acknowledgment of the assignor made before a proper authority.

SEC. 2. No such assignment shall be valid against an attaching creditor of the assignor unless, in addition to the provisions of the preceding section, such assignment shall be recorded before such attachment in the town clerk's office in the town where the assignor resides, or, if he resides without the State, in the town where the employer resides, and a copy thereof left with the employer from whom the wages are to become due.

SEC. 3. All certificates of acknowledgment required under section one of this act shall bear date of the day such acknowledgment is made, and any person who shall intentionally date such a certificate of acknowledgment as of a date other than the actual date such acknowledgment is made, shall be fined not more than twenty-five dollars, or imprisoned for not more than thirty days, or both.

Approved May 19, 1905.



CHAPTER 99.—*Bribery, etc., of employees.*

SECTION 1. Every person who corruptly gives, offers, or promises to an agent, employee, or servant any gift or gratuity whatever, with intent to influence his action in relation to his principal's, employer's, or master's business, and every agent, employee, or servant who corruptly requests or accepts a gift or gratuity or a promise to make a gift or to do an act beneficial to himself, under an agreement or with an understanding that he shall act in any particular manner in relation to his principal's, employer's, or master's business, and every agent, employee, or servant, who, being authorized to procure materials, supplies, or other articles, either by purchase or contract, for his principal, employer, or master, or to employ service or labor for his principal, employer, or master, receives directly or indirectly for himself or for another a commission, discount, or bonus from the person who makes such sale or contract, or furnishes such materials, supplies, or other articles, or from a person who renders such service or labor, and every person who gives or offers such an agent, employee, or servant such commission, discount, or bonus, shall be punished by a fine of not less than ten dollars nor more than five hundred dollars, or by imprisonment for not more than one year, or by both such fine and imprisonment.

SEC. 2. Every person who corruptly gives, pays, offers, or promises any gift or valuable thing to any clerk, stenographer, secretary, or agent of any employer for the purpose of inducing such clerk, stenographer, secretary, or agent to wrongfully surrender or betray the private correspondence, books, or accounts of such employer, or to wrongfully disclose the contents of such private correspondence, books, or accounts, and every person who, being a clerk, stenographer, secretary, or agent of any employer, corruptly requests or accepts any gift or valuable thing under an agreement to wrongfully surrender or betray, or to wrongfully disclose the contents of the private correspondence, books, or accounts of such employer, or who, being a clerk, stenographer, secretary, or agent of any employer, corruptly or wrongfully surrenders, betrays, or discloses the contents of the private correspondence, books, or accounts of such employer, shall be punished by a fine of not more than two hundred dollars, or by imprisonment for not more than six months, or by both such fine and imprisonment.

SEC. 3. No person shall be excused from attending, testifying, or producing books, papers, contracts, agreements, and documents before any court, or in obedience to the subpoena of any court having jurisdiction of the misdemeanor, on the ground or for the reason that the testimony or evidence, documentary or otherwise, required of him, may tend to incriminate him or subject him to a penalty or forfeiture; but no person shall be liable to any suit or prosecution, civil or criminal, for or on account of any transaction, matter, or thing concerning which he may testify or produce evidence, documentary or otherwise, before said court, or in obedience to its subpoena, or in any such case or proceeding.

Approved, May 24, 1905.

CHAPTER 140.—*Inspection of factories—Toilet rooms in foundries.*

SECTION 1. The factory inspector shall have power and authority by order to that effect to require the proprietor of any foundry in this State in which ten or more men are employed, and situated in a locality where there is such system for the disposal of sewage as to make such order practicable, to provide for the use of such employees a toilet room of such suitable dimensions as such inspector may determine, containing wash bowls or sinks connected with running water, with facilities for heating the same, such room to be directly connected with such foundry building, properly heated, ventilated, and protected from the dust of said foundry.

SEC. 2. Any person, company, or corporation failing to comply with such order shall be fined not more than fifty dollars, in each prosecution for such neglect or refusal to obey such order.

Approved June 15, 1905.

CHAPTER 189.—*Examination and licensing of barbers.*

SECTION 1. Section three of chapter 130 of the public acts of 1903 is hereby amended by striking out at the end of said section the words "The board of examiners shall not renew any barber's license unless the application for renewal be received by said board within thirty days after the expiration of such license" and inserting in lieu thereof the words "The board of examiners may



renew any barber's license if application for such renewal be received by said board within two years after the expiration of such license."

Approved, June 29, 1905.

#### CHAPTER 271.—*Employment offices.*

SECTION 1. Section 4613 of the general statutes is hereby amended so that said section as amended shall read as follows: Every such licensed person shall give to each applicant for employment from whom a fee or other valuable thing shall be received for procuring such employment, which fee or valuable thing shall in no case exceed the value of ten per centum of the first month's wages, a receipt in which shall be stated the name of the applicant, the amount of the fee or other valuable thing, the date, the name or nature of the employment or situation to be procured, and a separate receipt in which shall be stated the name and address of the person or persons to whom the applicant shall be referred or sent for employment or work. In case the applicant shall not obtain or accept a situation or employment through the agency of such licensed person within one month after registration as aforesaid, said licensed person shall forthwith return to said applicant upon demand the full amount of the fee or valuable thing paid or delivered by said applicant to said licensed person, provided that such demand be made within thirty days after the expiration of the period aforesaid. In case the applicant shall accept the situation with the person to whom said applicant has been referred, said applicant shall forfeit the whole amount of the fee or valuable thing paid aforesaid. Every such receipt shall have printed on its back, in the English language, a copy of this section, and every licensed person shall cause a plain and legibly printed copy of this chapter to be posted in a conspicuous place in such agency or place of business. No person shall display on any sign, window, or in any publication, the name the Connecticut free public employment bureau or a name similar thereto.

Approved, July 19, 1905.

### DELAWARE.

#### ACTS OF 1905.

#### CHAPTER 123.—*Employment of children.*

(See pp. 207, 208, above.)

### HAWAII.

#### ACTS OF 1905.

#### ACT No. 15.—*Sunday labor.*

SECTION 1. Section 3190 of the Revised Laws of Hawaii is hereby amended so as to read as follows:

Section 3190. All labor on Sunday is forbidden, excepting works of necessity or mercy, in which are included all labor that is needful for the good order, health, comfort or safety of the community, or for the protection of property from unforeseen disaster, or danger of destruction or injury, or which may be required for the prosecution of or attendance upon religious worship, or for the furnishing of opportunities of reading or study: *Provided, however,* That this section shall not apply to newspaper printing offices, steamship companies, railroads, telegraph and telephone companies, hotels, inns, restaurants, cigar stores, ice cream parlors, soda water stands, drug stores, livery stables, hackmen, owners and operators of licensed shore boats, news depots, graziers and ranchmen, electric light plants, gas works and slaughter houses: *And provided further,* That personal baggage may be conveyed to and from vessels leaving and arriving at port on that day, and to and from any railroad stations; that on Sunday the loading and unloading of vessels engaged in inter-island, inter-state or foreign commerce shall be permitted, but no freight, except live stock and goods of a perishable nature, shall be drayed or conveyed from the dock, pier, wharf, or landing upon which it is unloaded; that during the entire day milk, bread, fruit and ice may be sold and delivered; that until 10 o'clock in the fore-



noon fresh meat, fresh fish, and fresh vegetables may be sold and delivered, and laundrymen and laundries may deliver and collect laundry or washing, and that barber shops may be kept open until 11 o'clock in the forenoon.

Passed over governor's veto, March 29, 31, 1905.

ACT No. 46.—*Examination and licensing of horseshoers.*

SECTION 1. No person shall engage in the business of a horseshoer or a farrier for hire without first having a license so to do as provided herein.

SEC. 2. Any person who may wish to obtain a horseshoer's and farrier's license shall make a written application therefor to the treasurer wherein shall be stated the residence of the applicant, his age, the length of time and the place where the applicant has carried on his trade and the place where he intends to carry on his trade.

Before such application is granted the high sheriff or any sheriff of the Territory shall examine the applicant to determine whether he is a suitable person to carry on the trade of a horseshoer and farrier for hire, and on it being shown to the said high sheriff or sheriff that such applicant is a suitable person to engage in such trade, the fact shall be attested on said application by the examining high sheriff or sheriff.

SEC. 3. The license fee of farriers shall be five dollars per annum and payable to the treasurer.

SEC. 4. Whoever shall violate the provisions of this act shall be guilty of a misdemeanor and, on conviction, be fined not more than fifty dollars.

Approved this 18th day of April, A. D., 1905.

ACT No. 57.—*Emigrant agents.*

SECTION 1. The annual fee for a license for each emigrant agent, or employer or employee of such agent, doing business in this Territory, shall be five hundred dollars.

SEC. 2. The said license shall be issued in the same manner as is provided for the issuance of other licenses by chapter 102 of the Revised Laws of Hawaii, 1905.

SEC. 3. Any person who shall engage in business as an emigrant agent without first obtaining a license, issued in conformity with the provisions hereof, and of said chapter 102, or who shall violate or fail to observe any of the provisions hereof, or of said chapter, shall be guilty of a misdemeanor, and upon conviction shall be fined in a sum not less than the annual fee, and not more than twice the annual fee herein provided for the carrying on of such business.

SEC. 4. The emigrant agent, as used in this act, shall be held to mean a person engaged in hiring laborers in the Territory of Hawaii, to be employed beyond the limits of the Territory, or engaged in inducing laborers in the Territory of Hawaii to go beyond the limits of the Territory of Hawaii for the purpose of being employed.

Approved this 25th day of April, A. D., 1905.

ACT No. 67.—*Employment of minors in saloons—Sale of liquor to employees.*

SECTION 12. Licenses shall be subject to the following conditions and provisions:

\* \* \* \* \*

(4) No licensee of the first, second, fourth or fifth class, except such as conduct an hotel business on the same premises, shall employ a minor in or about the room or rooms where intoxicating liquors are manufactured or furnished;

(5) No intoxicating liquor shall be sold or furnished to any person whose employer has given notice as hereinafter provided, forbidding the sale to such person;

\* \* \* \* \*

SEC. 49. A husband, wife, child, parent, guardian, employer or other person who is injured in person, property or means of support by an intoxicated person or in consequence of the intoxication of any person, shall have the right of action in his or her own name, jointly or severally, against any person or persons who by selling or furnishing intoxicating liquor have caused, in whole or in



part, such intoxication. The party injured, or his or her legal representatives, may bring either a joint action against the person intoxicated and the person or persons who furnished the liquor and the owner of the building as hereinabove stated, or a separate action against either or any of them.

SEC. 51. Any husband, wife, daughter, son, brother, sister, parent, guardian or employer of any person who is an habitual drunkard, and who by excessive use of intoxicating liquor injures his or her health, or endangers or interrupts the peace or happiness of his or her family, or becomes a public nuisance, may give written notice to any licensee not to sell or furnish any intoxicating liquor to such habitual drunkard, and thereafter any licensee who sells, gives or in any manner furnishes any intoxicating liquor to such habitual drunkard, shall upon conviction thereof be held liable to the penalties hereinabove described.

Approved this 26th day of April, 1905.







CUMULATIVE INDEX OF LABOR LAWS AND DECISIONS RELATING THERETO.

[This index includes all labor laws enacted since January 1, 1904, and published in successive issues of the Bulletin, beginning with Bulletin No. 57, the issue of March, 1905. Laws enacted previously appear in the Tenth Special Report of the Commissioner of Labor. The decisions indexed under the various headings relate to the laws on the same subjects without regard to their date of enactment and are indicated by the letter "D" in parentheses following the name of the State.]

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